**IN THE UNITED STATES DISTRICT COURT**
**FOR THE SOUTHERN DISTRICT OF TEXAS**
**HOUSTON DIVISION**

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| EXXON MOBIL CORPORATION, | ) | |
| Plaintiff, | ) | |
| v. | ) | 4:10-CV-02386 (LHR) |
| | ) | 4:11-CV-01814 (LHR) |
| UNITED STATES OF AMERICA, | ) | |
| Defendant. | ) | |

**CONSOLIDATED STATEMENT OF UNDISPUTED FACTS IN SUPPORT OF UNITED STATES' MOTIONS FOR PARTIAL SUMMARY JUDGMENT**

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## GLOSSARY

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|---|---|
| Avgas | Aviation gasoline |
| BOW | Baytown Ordnance Works |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§ 9601-75 |
| Committee | Central Refinery Loss Committee |
| Complex(es) | The Refinery(ies) and chemical plants |
| Corps | United States Army Corps of Engineers |
| Department | Oil Conservation Department |
| DPC | Defense Plant Corporation |
| DSC | Defense Supplies Corporation |
| Exxon | Plaintiff Exxon Mobil Corporation |
| Humble | Humble Oil & Refining Company |
| NCP | National Contingency Plan |
| OPA | Office of Price Administration |
| OPC | Office of Petroleum Coordinator |
| PAD | Petroleum Administration for Defense |
| PAW | Petroleum Administration for War |
| PIWC | Petroleum Industry War Council |
| PRP | Potentially Responsible Party |
| RCRA | Resource Conversation and Recovery Act, 42 U.S.C. §§ 6901-92k. |
| RFC | Reconstruction Finance Corporation |
| RRC | Rubber Reserve Company |
| Site(s) | The Refinery(ies), chemical plants, and other nearby areas or surface waters |

| | |
|---|---|
| Standard | Standard Oil Company of Louisiana |
| Standard NJ | Standard Oil Company of New Jersey |
| WPB | War Production Board |
| WWII | World War II |

The United States respectfully submits the following undisputed facts in support of its motions for partial summary judgment in each of the above-captioned cases.

## I. Facts Related to the United States' Counterclaims.

1. Exxon admits that it is the current "owner" and "operator" of the Baytown Refinery and chemical plant (collectively, the "Baytown Complex"), as those terms are defined in Section 101(20)(A) of CERCLA. Pl. Resp. to Def.'s Third Set of Discovery Requests, Resp. to Requests for Admission ("Pl. Resp. to RFA") No. 13 (June 14, 2013).

2. During World War II ("WWII") and the Korean War, hazardous substances were released or disposed of at the Baytown Refinery at a time when Exxon concedes that it was an "owner" of the Baytown Refinery. Pl. Resp. to RFA Nos. 14, 20.

3. During WWII and the Korean War, hazardous substances were released or disposed of at the Baytown Refinery. Exxon admits to being an "operator" of the Refinery between 1939-1940, but denies being an "operator" of the Refinery between 1941-1945 and 1950-1953. Pl. Resp. to RFA Nos. 15, 21.

4. Hazardous substances were released or disposed of at Plancors 485, 1082, and 1909 and the BOW during WWII and at Plancors 485 and 1082 and the Baytown Ordnance Works ("BOW") during the Korean War. Exxon denies that it was an "operator" of any of these plants during either war. Pl. Resp. to RFA Nos. 16, 17, 22, 23.

5. Exxon admits that it is the current "owner" and "operator" of the Baton Rouge Refinery and chemical plant (collectively, the "Baton Rouge Complex"), as those terms are defined in Section 101(20)(A) of CERCLA. Pl. Resp. to RFA No. 26.

6. During WWII and the Korean War, hazardous substances were released or disposed of at the Baton Rouge Refinery at a time when Exxon concedes that it was an "owner" of the Baton Rouge Refinery. Pl. Resp. to RFA Nos. 27, 31.

7. During WWII and the Korean War, hazardous substances were released or disposed of at the Baton Rouge Refinery. Exxon admits that it was an "operator" of the Refinery between 1939-1940, but denies that it was an "operator" of the Refinery between 1941-1945 and 1950-1953. Pl. Resp. to RFA Nos. 28, 32.

8. Hazardous substances were released or disposed of at Plancors 152, 572, 1065, 1355, 1526, and 1868 during WWII and at Plancors 152, 572, 1065, and 1355 during the Korean War. Exxon denies that it was an "operator" of any of these plants during either war. Pl. Resp. to RFA Nos. 29, 33.

9. Exxon is the successor-in-interest of Humble Oil & Refining Company ("Humble"), Standard Oil Company of Louisiana ("Standard"), and Standard Oil Company of New Jersey ("Standard NJ"). Pl.'s Resp. to RFA Nos. 3-5.

10. Exxon is a "person" within the meaning of Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

11. Defendant is a "person" within the meaning of Section 101(21) of CERCLA, 42 U.S.C. § 9601(21). See Baytown Compl. ¶ 34; Baton Rouge Compl. ¶ 32.

12. The Baytown Complex is a "facility" or are "facilities" within the meaning of Section 101(19) of CERCLA, 42 U.S.C. § 9601(9). See Baytown Compl. ¶ 35.

13. There have been releases and/or threatened releases of hazardous substances into the environment at the Baytown Site within the meaning of Section 101(22) of CERCLA, 42 U.S.C. § 9601(22). See Baytown Compl. ¶ 36.

14. Exxon is the current "owner" and "operator" of the Baytown Site within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1). See Pl. Resp. to RFA 13 (Nov. 19, 2012).

15. Exxon is a person who at the time of disposal of any hazardous substance owned a facility at which hazardous substances were disposed of at the Baytown Site within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2). See Pl. Resp. to RFA 14, 20 (Nov. 19, 2012).

16. Exxon is a person who at the time of disposal of any hazardous substance operated a facility at which hazardous substances were disposed of at the Baytown Site within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).

17. Exxon is a person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, or hazardous substances owned or possessed by such person, by any other party or entity, at any facility owned or operated by another party or entity and containing such hazardous substances at the Baytown Site within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

18. The Baton Rouge Complex is a "facility" or are "facilities" within the meaning of Section 101(19) of CERCLA, 42 U.S.C. § 9601(9). Baton Rouge Compl. ¶ 33.

19. There have been releases and/or threatened releases of hazardous substances into the environment at the Baton Rouge Site within the meaning of Section 101(22) of CERCLA, 42 U.S.C. § 9601(22). Baton Rouge Compl. ¶ 34.

20. Exxon is the current "owner" and "operator" of the Baton Rouge Site within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1). See Pl. Resp. to RFA 26 (Nov. 19, 2012).

21. Exxon is a person who at the time of disposal of any hazardous substance owned a facility at which hazardous substances were disposed of at the Baton Rouge Site within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2). See Pl. Resp. to RFA 27, 31 (Nov. 19, 2012).

22. Exxon is a person who at the time of disposal of any hazardous substance operated a facility at which hazardous substances were disposed of at the Baton Rouge Site within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).

23. Exxon is a person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, or hazardous substances owned or possessed by such person, by any other party or entity, at any facility owned or operated by another party or entity and containing such hazardous substances at the Baton Rouge Site within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

## II. Facts Related to the United States' Authority During WWII and the Korean War.

24. On January 16, 1942, President Roosevelt, through Executive Order 9024, established the War Production Board ("WPB"). Executive Order 9024 stated that the WPB was established in order to "assur[e] the most effective prosecution of war procurement and production" and delegated to it the power to impose mandatory policies and procedures for such production and procurement, including the power to issue mandatory directives concerning "purchasing, contracting, specifications, and construction." Exec. Order No. 9024, ¶ 2, 7 Fed. Reg. 329, 329-30 (Jan. 17, 1942).

25. The WPB developed the Controlled Materials Plan, which was instituted in April 1943, in order to allocate through a priority system key materials like steel, aluminum, iron, and copper that were important to the war effort. J. W. Frey & H. C. Ide, A History of the Petroleum Administration for War, 1941-1945 (1946), MIS-00022327-22854 at MIS00022534-22536 ("Frey & Ide, A History of the PAW").

26. In December 1942, President Roosevelt, through Executive Order 9276, established the Petroleum Administration for War ("PAW"). The PAW was created "to coordinate and centralize the war policies and actions of the Government relating to petroleum with a view toward providing adequate supplies of petroleum for the successful prosecution of the war and for other essential purposes." Exec. Order No. 9276, 7 Fed. Reg. 10,091 (Dec. 2, 1942).

27. The United States recruited private industry employees to lead key wartime petroleum- and procurement-focused agencies. H. Chandler Ide, Mobilizing the Oil Forces (Nov. 28, 1945), US-SH63840-61 at US-SH063850-51; Frey & Ide, A History of the PAW at MIS-00022418 ("The industry has on many occasions freely acknowledged its high regard for the quality of PAW's staff and confidence in its leadership."). For example:

> [PAW] followed the policy from the start of recruiting technical, operating, and executive staff largely from men who had engaged extensively in petroleum operations, and thus had an intimate familiarity with the problems involved.
>
> As a result of this policy, approximately three-fourths of the executive and technical staff of PAW came from oil companies, large and small alike, or from fields closely associated with the oil industry.

Frey & Ide, A History of the PAW at MIS-00022376.

28. During WWII, the "President, through the head of the War or Navy Departments of the Government . . . [was] . . . authorized to take immediate possession of any such plant" that "refuse[d] to manufacture the kind, quantity, or quality of arms or ammunition, or the parts thereof, or any necessary supplies or equipment . . . ." Selective Training and Service Act of 1940, 54 Stat. 885, 892 (1940). Companies were required to be compensated in the event of such seizure. Id.

29. The United States issued sixty-four executive orders during WWII authorizing an agency of the federal government to seize facilities. Brigham Dep. Tr. 260:20-261:6 (Vol. II, Feb. 8, 2013) ("Brigham Dep."); Gravel Dep. Tr. 375:4-5 (Vol. I, Feb. 28, 2013) ("Gravel Dep. Vol. I").

30. Alfred J. Gravel, Exxon's proffered expert historian, stated that the seizure orders were issued because of labor unrest and management issues that affected production at the facilities. Gravel Dep. Vol. I, 375:21-376:4.

31. Dr. Jay L. Brigham, the United States' proffered expert historian, stated that these seizures were "on paper" and employees of the seized facilities would generally continue to operate the facilities. Brigham Dep., 262:21-263:8.

32. When Humble's Ingleside Refinery was seized, Humble acknowledged that "[t]he seizure was merely a token one, since the company continued to operate the Refinery for its own account under the superintendency of Frank Gross." Lawson & Porter, History of Humble Oil and Refining Co., MIS-00023931-4344 at MIS-00024262.

33. When German U-boats began patrolling American coasts, creating shipping problems for refineries like Baytown and Baton Rouge that relied heavily on barges, the Office of Defense Transportation and PAW facilitated transportation by rail. See Gravel Dep. Vol. I, 296:19-297:6, 298:2-19.

34. Under the Aviation Gasoline Reimbursement Plan, aviation gasoline ("avgas") producers were specially compensated if their shipping costs were higher than usual to meet production deadlines or in the event of other unusual expenditures. See PAW, Mem. of Understanding on Plan to Reimburse Manufacturers of 91 Octane and Higher Aviation Gasoline for Losses Incurred in Following Office of Petroleum Coordinator Recommendations (July 24, 1942) at MAA_EM-000873-75; Gravel Dep. Vol. I, 183:19-184:9.

35. The United States recognized that "a high degree of flexibility" would be required to achieve production and "accomplish[] emergency adjustments" in the oil industry. Frey & Ide, A History of the PAW at MIS-00022406.

36. According to Lincoln Gordon, the vice chairman of the WPB, the WPB approached negotiations with the oil industry with a "hands off operations, not hands on" philosophy. See, e.g., Lincoln Gordon Trial Testimony 11290:19-11291:10 (June 18, 1991) United States v. Hooker Chems. & Plastics, Corp., Civ. No. 79-990 (W.D.N.Y.) ("Gordon Testimony") at US-GEN012141-42. "The idea was that we would regulate what could be done in the flow of materials, the conservation of materials, but operations were for individual businesses to carry on . . . ." Id. The WPB did not "participate in the actual manufacturing operations at individual plants . . . ." Id. at 11284:25-11285:3 at US-GEN-12139-40.

37. PAW helped the oil industry retain skilled workers by petitioning the Selective Service to designate certain occupations in the industry as essential for the war. Frey & Ide, A History of the PAW at MIS-00022508-11.

38. The Petroleum Industry War Council ("PIWC") and Aviation Gasoline Advisory Committee, two advisory committees to Office of Petroleum Coordinator ("OPC") and PAW, were also comprised of individuals from the oil industry. H. C. Ide, Mobilizing the Oil Forces at US-SH063855-56; Frey & Ide, A History of the PAW at MIS-00022577-78. Humble's own President Weiss served on the PIWC. Larson & Porter, History of Humble Oil, MIS-00023931-24344 at MIS-00024246. The PIWC members served voluntarily and "without compensation and likewise bore the costs of time and travel to participate in the council work." Frey & Ide, A History of the PAW at MIS-00022415.

39. The OPC surveyed industry at the outset of the war to determine the various refineries' needs and capabilities. W. Tidwell & B. O'Callaghan, The Role of the Defense Supplies Corporation in the Wartime Aviation Gasoline Program (1948), MIS-00022855-23086 at MIS-00022868. PAW continued to consult with the oil industry throughout the war before making key decisions. See, e.g., Wartime Petroleum Policy under the Petroleum Administration for War, Hearings Before U.S. Senate Special Committee Investigating Petroleum Resources (1946), MIS-00024395-591 at MIS-00024424 ("PAW made a practice of first securing the

judgment of the industry before making major policy decisions, or launching operating programs, or issuing regulations.").

40. Several controls were put in place nationwide to limit extreme industry profiteering and inflation that characterized World War I, such as the creation of the Office of Price Administration ("OPA") and the passage of the First and Second Renegotiation Acts. See Koistinen, Arsenal of World War II, US-GEN005619-42 at US-GEN005639-5642; Smith, United States Army in World War II (1959), US-GEN005732-64 at US-GEN005737. The Renegotiation Acts' terms applied nationwide to any contracts exceeding $100,000. 56 Stat. 245 (1942); 58 Stat. 78, 81-82 (1944).

41. The Petroleum Administration for Defense's ("PAD") authority during the Korean War was similar to the PAW's during WWII (although during the Korean War, avgas production was not regulated as stringently as in WWII and war materials were not subject to allocation to the extent that they had been during WWII), and the agency also recruited members of the oil industry. See, e.g., Exec. Order No. 10161, 15 Fed. Reg. 6105, at 6105-6108 (Sept. 9, 1950); A. Kuhl, History of PAD at MISC-00005164, MISC-00005167, MISC-00005172-74; B. Borwn, Oil Men in Washington, 1950-1952 (1965), MISC-00015434-804 at MISC-00015477-78; 15510-11; Gravel Dep. Tr. 454:5-20 (Vol. II, March 1, 2013) ("Gravel Dep. Vol. II"). However, the PAD issued only six orders affecting the oil industry, four of which concerned avgas. See, e.g., PAD Order No. 1 (Feb. 27, 1951), MISC-00005309-12, as amended (Mar. 1, 1952), MISC-00005299-301; H. Noyes to J. Warren re PAD Order No. 2 (Feb. 9, 1953), MISC-00005264-66; PAD Order No. 3 (Oct. 19, 1952), MISC-00005315-18; PAD Order No. 4 (Oct. 19, 1952), MISC-00005319-21; PAD Order No. 5 (May 9, 1952), MISC-00005248-63; PAD Order No. 6 (May 6, 1952), MISC-00005351-57. In contrast, the PAW issued approximately 80 such orders during WWII. Frey & Ide, A History of the PAW at MIS-00022392.

42. During the Korean War, oil products could be transported by pipelines that had been built since WWII, alleviating transportation problems faced during WWII. See, e.g., Frey & Ide, A History of the PAW at MIS-00022825-28.

43. There are a lot of documentary gaps in information about the contracts Exxon had with the United States during the Korean War. Gravel Dep. Vol. II, 458:14 – 459:1.

## III. Facts Related to the Defense Plant Corporation and Plancors Generally.

44. The Defense Plant Corporation ("DPC") was established on August 22, 1940, as a subsidiary of the Reconstruction Finance Corporation ("RFC"). Smith, United States Army in World War II at US-GEN005748.

45. Lease agreements with the DPC, along with associated supply contracts, were a significant means of providing public money to facilitate expansion of private industrial capacity in the United States during WWII. During the war, there were more than 2,300 DPC plants and projects, valued at more than $7.2 billion, which altogether accounted for 30% of the funding for building new facilities and the purchase of equipment during the war. See G. White, Billions for Defense: Government Financing by the Defense Plant Corporation During World War II (1980) at US-GEN005775-76; Projects Approved by RFC-Office of Defense Plants as of 6/30/1946, US-GEN003943-4107.

46. Generally, prior to establishing a DPC contract, officials from the Army, Navy, WPB, or some other federal procurement agency that desired to enter into a supply contract with a private company would meet with company representatives to determine whether additional buildings, machinery, or equipment were necessary to fulfill the order. The procurement agency would then sponsor the contract with the DPC. The DPC, in turn, would provide the funding for the purchase of equipment and then lease the equipment to the contractor. Smith, United States Army in World War II at US-GEN005748-56.

47. Generally, the DPC lease would include a rent schedule, termination provisions, and language concerning purchase options. Title to the buildings, machinery, or equipment would remain with the DPC unless or until the company exercised its purchase option. Id.

48. The DPC was dissolved by Act of Congress effective July 1, 1945, and was succeeded by the RFC in all of its functions, including as lessor for those Plancors that continued to operate beyond the end of WWII. See, e.g., Lease Contract between Humble and RFC, dated Sept. 1, 1945, BAYHIS-00008853-56.

## IV. Facts Related to the Baytown and Baton Rouge Refineries and Humble and Standard's Aviation Gasoline ("Avgas") Contracts with the United States.

49. The Baytown Refinery commenced operations in approximately 1920. Humble Oil & Refining Company ("Humble"), a predecessor to Exxon, operated the Refinery. Baytown Compl. ¶ 11.

50. The Baytown Refinery was the largest and arguably most advanced in the country, due to Humble's own expansion efforts in the 1920s and 1930s. H. Larson, E. Knowleton & C. Popple, New Horizons: History of Standard Oil Co. (New Jersey) 1927-1950 (1971), MIS-00023443-930 at MIS-00023538. The refining capacity at Baytown was 30,000 barrels of crude oil per day in 1925. Moody's Industrials (1925), US-GEN003215-18 at US-GEN003217. By 1930, it was 120,000 barrels of crude oil per day. Moody's Manual of Investments (1930), US-GEN003243-49 at US-GEN003247.

51. Humble's refining equipment and technology was cutting edge by industry standards. Larson & Porter, History of Humble Oil at MIS-00024243.

52. Humble researched and developed the process to make avgas in anticipation of commercial and military demand years before the start of WW II. Larson & Porter, History of Humble Oil. Id. at MIS-00024257. See also Gravel Dep. Vol. I, 251:2-15 (explaining that Exxon "had the research and development completed" before World War II).

53. In 1938, Humble developed the alkylation process and put into operation the world's first commercial alkylation plant, which was necessary for the production of avgas. History of the Baytown Refinery, BAYC-00000658-61 at BAYC-00000658.

54. By 1939, Humble was selling commercial avgas. See Data on War Projects: Baytown Refinery, Humble Oil & Refining Co. (June 2, 1943) at BAYHIS-00028171.

55. In 1940, Exxon's predecessor companies were on the leading edge of catalytic cracking, a key element in the process for producing avgas. Gravel Dep. Vol. I, 312:1-20; History of the Baytown Refinery at BAYC-00000658.

56. In 1944, the DPC asked to visit the Baytown Refinery to learn from Humble how to maintain, test, and inspect 100-octane avgas equipment. Letter from H. Baker, Vice President, Humble Oil & Refining Co., to R. Cragin, Ass't Director of Refining, PAW (Feb. 2, 1944), MAA_EM-000689.

57. Exxon's predecessors were also on the forefront in developing the synthetic rubber industry and its production processes. Gravel Dep. Vol. I, 311:11-312:10.

58. The Baton Rouge Refinery started operations in approximately 1909. At that time, Standard operated the Refinery. Baton Rouge Compl. ¶ 11.

59. In 1935, the average daily crude run of the Baton Rouge Refinery was 81,800 barrels per day. Moody's Manual of Investments (1936), US-GEN003293-3305 at US-GEN003296. By 1937, that figure had increased to 103,100 barrels per day. Moody's Manual of Investments (1939), US-GEN003333-46 at US-GEN003335. By mid-1941, the Baton Rouge Refinery was producing 7,230 barrels of avgas per day, the majority of which was 100-octane avgas. Letter from M. Rathbone to W. Gary (July 23, 1941) at MIS-00005039-44.

60. According to Mr. Gravel, by the start of the war, Exxon's precedessors were already producing or had the capability to produce each of the products they made during WW II. Gravel Dep. Vol. I, 251:2-15.

61. On January 13, 1942, the Defense Supplies Corporation ("DSC") and Standard NJ entered into a 100-octane avgas contract. "AGREEMENT between DEFENSE SUPPLIES CORPORATION and STANDARD OIL CORPORATION OF NEW JERSEY - 100-Octane Aviation Gasoline" ("Master Avgas Contract"), MIS-00022185-214.

62. This Master Avgas Contract provided that Humble and Standard were Standard NJ's "Suppliers" and the avgas manufactured by Humble and Standard under contract with Standard NJ would be supplied to the DSC. Id. at MIS-00022186.

63. The term of the Master Avgas Contract was January 13, 1942 to February 28, 1946. Id. at MIS-00022186, MIS-00022198.

64. Standard NJ drafted the initial contract proposal. See, e.g., Letter from C. Smith, Standard NJ, to W. Gary, OPC (Nov. 18, 1941), BAYHIS-00003759-66 at BAYHIS-00003759 ("To expedite these negotiations . . . we are submitting an informal outline of the type of arrangement which we believe would best meet the situation . . . ").

65. Standard NJ and the United States negotiated the terms of the Master Avgas Contract, including the price that the United States would pay for avgas. Gravel Dep. Vol. I, 480:16-482:14. Standard NJ and Standard continued to negotiate for favorable amendments after the contract was first signed. C. F. Smith, Standard NJ, to H. H. Baker, Humble Oil & Refining Co. (Jan. 26, 1943), BRHIS00010341-62.

66. The Master Avgas Contract provided that the United States would transport finished avgas from the Refineries. Master Avgas Contract at MIS-00022201 ("Buyer shall take delivery of said gasoline in tank cars, barges, tank vessels, or tank trucks . . . to be supplied by Buyer . . . ").

67. Effective February 4, 1942, the DSC and Humble entered into a 100-octane avgas supply contract regarding the production of avgas at the Baytown Refinery for sale to the DSC. "CONTRACT between Defense Supplies Corporation and Humble Oil & Refining Company - 100 Octane Aviation Gasoline" ("Baytown Avgas Contract"), BAYHIS-00010202-19.

68. This contract provided that Humble was one of Standard NJ's suppliers of avgas for ultimate sale to the DSC and further provided that Humble would make direct sales to the DSC of avgas produced at the Baytown Refinery. Id. at BAYHIS-00010203.

69. The Baytown Avgas Contract also provided that Humble was "currently enlarging its refinery so as to enable it to further increase its production of 100 octane aviation gasoline" for sale to both the United States and Standard NJ. Id.

70. Title to the avgas stayed with the companies until delivery of the finished product to the United States. Id. at BAYHIS-00010210; Master Avgas Contract at MIS-00022201.

71. The term of the contract was February 4, 1942 to February 28, 1946. Baytown Avgas Contract at BAYHIS-00010203, BAYHIS-00010210.

72. Humble drafted the initial contract proposal. See, e.g., Letter from H. Baker, Vice President, Humble Oil & Refining Co., to W. Gary, Director of Refining, OPC (Nov. 19, 1941) at MAA_EM-000745-749 ("If our approach to the method of contracting is not in line with the desires of the Government, we would be glad to have your views as to a better method and to consider the whole subject with you."); Letter from H. Baker, Vice President, Humble Oil & Refining Co., to W. Gary, Director of Refining, OPC (Dec. 2, 1941), MAA_EM-001485-86 at MAA_EM001486 (stating that Humble "expect[ed] to reach some satisfactory agreement with the Government . . . either along the lines of [Humble's] proposal of November 19 or some mutually satisfactory modification thereof").

73. The United States and Humble negotiated the terms of the Baytown Avgas Contract over the course of several months. Brigham Dep., 249:16-250:7, 306:23-307:19. Humble wanted to continue selling avgas to its Texas customers and negotiated with the United States so that, ultimately, the Baytown Avgas Contract would contain a provision addressing Humble's concerns. See, e.g., Letter from H. Baker to W. Gary (Jan. 5, 1942) at MAA_EM-000728-43; H. Baker to W. Gary (Jan. 7, 1942) at MAA_EM-003789-94; Baytown Avgas Contract at BAYHIS-00010204.

74. The Master Avgas Contract and the Baytown Avgas Contract (collectively, the "Avgas Contracts") set the prices for the specific types of avgas to be produced and sold to the United States based on the estimated costs of production of the avgas. Master Avgas Contract at MIS-00022192-94, MIS-00022209-10; Baytown Avgas Contract at BAYHIS-00010205-07, BAYHIS-00010217-18.

75. The Avgas Contracts contained a number of price adjustment terms providing that if the cost of the relevant types of crude oil that were processed into avgas changed, the price for the avgas would likewise change by a certain percentage. Master Avgas Contract at MIS-00022195-22198; Baytown Avgas Contract at BAYHIS-00010207-09.

76. The Avgas Contracts specifically provided that if the war interfered with production "to such an extent that in the opinion of Seller the cost of refining 100 octane aviation gasoline is increased in respects other than those corrected by adjustment of the base price," the price paid by the United States must be raised "by an amount sufficient to offset such increased cost," unless the United Stats was willing to accept reduced production. Master Avgas Contract at MIS-00022197; Baytown Avgas Contract at BAYHIS-00010209.

77. Section XII of the Master Avgas Contract specifically provided the following:

> Buyer shall pay in addition to the price as established in Section IV and V hereof, any new or additional taxes, fees, or charges, other than income, excess profits, or corporate franchise taxes, which Seller or its Suppliers may be required by any municipal, state, or federal law in the United States or any foreign country to collect or pay by reason of the production, manufacture, sale or delivery of the [avgas].

Master Avgas Contract at MIS-00022205.

78. Section XII of the Baytown Avgas Contract specifically provided the following:

> Buyer shall pay in addition to the price as established in Section IV and V hereof, any new or additional taxes, fees, or charges, other than income, excess profits, or corporate franchise taxes, which Seller may be required to pay by any municipal, state, or federal law in the United States or any foreign country to collect or pay by reason of the production, manufacture, sale or delivery of the [avgas].

Baytown Avgas Contract at BAYHIS-00010214.

79. The Avgas Contracts specifically noted that motor fuel and other products were necessarily produced in connection with the production of avgas:

> [N]ormal operation of said Refinery in which substantial quantities of motor fuel and other products must necessarily be produced and sold in connection with the production of 100 octane aviation gasoline.

Master Avgas Contract at MIS-00022196; Baytown Avgas Contract at BAYHIS-00010208.

80. The Avgas Contracts did not confer on the United States any decision-making authority over or role in production. The United States simply agreed to buy 100-octane avgas. See Baytown Avgas Contract at BAYHIS-00010204; Master Avgas Contract at MIS-00022189.

81. The Avgas Contracts referenced the companies' existing labor contract commitments. See Master Avgas Contract at MIS-00022185-22214; Baytown Avgas Contract at BAYHIS-00010208.

82. Humble applied for and received tax amortization or "necessity" certificates worth more than $15 million during WWII. See Baytown Necessity Certificate Applications at US-BT000222-35, US-BT000236-57, US-BT000284-303, US-BT000304-15, US-BT000316; US-BT000325, US-BT000371-90, US-BT000391-409, US-BT000433-57, US-BT000468-77, US-BT000478-96, US-BT000497-506, US-BT000512, US-BT000532-64. Humble likely also received an additional four necessity certificates. See Baytown Necessity Certificate Applications at US-BT000258-83, US-BT000319, US-BT000327, US-BT000352-70, US-BT000507-11, US-BT000512-15.

83. Humble applied for and received tax amortization or "necessity" certificates worth more than $13 million during the Korean War. See Baytown Necessity Certificates at US-GEN002587, US-GEN002613, US-GEN002640, US-GEN002641, US-GEN002648, US-GEN002653, US-GEN002662, US-GEN002666, US-GEN002680-81, US-GEN002701-02, US-GEN002705, US-GEN002708, US-GEN002723, US-GEN002729, US-GEN002743, US-GEN002745.

84. Standard applied for and received tax amortization or "necessity" certificates worth more than $42 million during WWII. See Baton Rouge Necessity Certificate Applications at US-BR001063-78, US-BR001079-104, US-BR001105-11, US-BR001112-29, US-BR001130-38, US-BR001139-54, US-BR001155-66, US-BR001167-79.

85. Standard applied for and received tax amortization or "necessity" certificates worth more than $50 million during the Korean War. See Baton Rouge Necessity Certificate Applications at US-GEN002634-37, US-GEN002676-81, US-GEN002695, US-GEN002708-09, US-GEN002688, US-GEN002731-32, US-GEN002739-41, US-GEN002724-26.

86. Humble and Standard made significant profits on their contracts with the United States, as well as profits from other private customers. See, e.g., Moody's Manual of Investments (1942) US-GEN0003374-87; Moody's Manual of Investments (1943) US-GEN0003388-400; Moody's Manual of Investments (1944) at US-GEN0003401-12; Moody's Manual of Investments (1945) US-GEN0003413-25; Moody's Industrials (1946) US-GEN0003426-37. The companies were able to pay dividends to their shareholders during the war. See, e.g., Brigham Dep., 470:21-471:15.

## V. Facts Related to the Baytown Ordnance Works and the Plancors at Baytown and Baton Rouge.

87. In general, the DPC lease agreements called for Exxon's predecessors to design and construct the Plancors, subject to the DPC's engineering review and PAW's allocation of materials. Gravel Dep. Vol. II, 395:22-396:11, 398:1-10.

88. The rubber plants adjacent to the Refineries, which were Plancors, were owned by the federal government and designed, built, and operated by Exxon's predecessors. Gravel Dep. Vol. I, 167:16-168:14; Gravel Dep. Vol. II, 395:22-398:10.

### A. Plancors 485 and 1082 (Baytown).

89. Humble operated Plancors 485 and 1082 for the production of butadiene and butyl rubber under agreements with the United States from the inception of operations at these plants in 1943 and 1944, respectively. In a 1955 memorandum, Humble stated that "[f]rom the point of view of corporate powers, there is no difference between the operation of the plants by Humble while they were owned by a government agency and its operation of them after they became its property." Memorandum from Carl Illig re Power of Humble (Mar. 14, 1955), BAYC-00000571-72.

90. Humble and the DPC entered into an Agreement of Lease for Plancor 485 on March 23, 1942. Humble, as Lessee, agreed "to prepare or cause to be prepared, and to submit to Defense Corporation for its approval, or arrange for such submission of, such plans, designs, specifications, and schedules as may be required for the construction and equipment of the plant and the acquisition and installation of the equipment and machinery necessary" to manufacture

butadiene. Agreement of Lease between Humble and DPC, dated March 23, 1942, BAYHIS-00005756-65 at BAYHIS-00005756.

91. Upon approval of such plans, designs, specifications, and schedules by DPC, Humble also agreed to "as agent for Defense Corporation cause to be completed as soon as practicable . . . the construction and equipment of the plant and the acquisition and installation of the machinery and equipment . . . or to arrange for proceeding in such manner and for the completion of the Construction Program." Id. at BAYHIS-00005756-5757.

92. Also on March 23, 1942, Humble and the Rubber Reserve Company ("RRC") entered into an Operating Agreement for Plancor 485. That agreement provided that Humble "shall undertake all preparations necessary for the subsequent operation of the Plant for the production of butadiene . . . ." Operating Agreement between Humble and RRC, dated March 23, 1942, US-BT008223-583 at US-BT008548.

93. A separate provision of the Operating Agreement stated that Humble's "costs" in producing butadiene shall include, inter alia, the "cost of disposing of all waste solids, by-products, liquids and gases resulting from manufacturing operations at the Plant and the cost of disposing of worn-out or obsolete equipment, junk and debris." Id. at US-BT008558.

94. An Agreement of Lease was entered into between Humble and the DPC for Plancor 1082 on May 18, 1942. Humble, as Lessee, agreed "to prepare or cause to be prepared, and to submit to Defense Corporation for its approval, or arrange for such submission of, such plans, designs, specifications, and schedules as may be required for the construction and equipment of the plant and the acquisition and installation of the equipment and machinery necessary" to manufacture butyl rubber. Agreement of Lease between DPC and Humble, dated May 18, 1942, US-BT007921-8068 at US-BT008057.

95. Upon approval of such plans, designs, specifications, and schedules by DPC, Humble also agreed to "as agent for Defense Corporation cause to be completed as soon as practicable . . . the construction and equipment of the plant and the acquisition and installation of the machinery and equipment . . . or to arrange for proceeding in such manner and for the completion of the Construction Program." Id. at US-BT008057-58.

96. On May 18, 1942, Humble and the RRC entered into an Operating Agreement for Plancor 1082. A provision of that agreement provided that Humble "shall undertake all preparations necessary for the subsequent operation of the Plant for the production of butyl rubber . . ." Id. at US-BT008027.

97. A separate provision of the Operating Agreement stated that Humble's "costs" in producing butyl rubber include, inter alia, the "cost of disposing of all waste solids, by-products, liquids and gases resulting from manufacturing operations at the Plant and the cost of disposing of worn-out or obsolete equipment, junk and debris." Id. at US-BT008037.

98. The Operating Agreements and Agreements of Lease for Plancors 485 and 1082 both were extended following WWII and continued through the Korean War period. See, e.g., Extension Agreement (Dec. 27, 1950), US-BT008108-115; Extension Agreement (Dec. 27, 1950), US-BT007827-7833 (Extension Agreements for Plancors 485 and 1082, respectively, extending term of Operating and Lease Agreements through June 30, 1952).

99. The Operating Agreements and Agreements of Lease for Plancors 485 and 1082 both were terminated in August 1957. Termination Agreement (Aug. 21, 1957), BAYC-0001799- 10802 (Termination Agreements for Plancors 485 and 1082 respectively).

**B. Plancor 1909 (Baytown).**

100. In 1943 the DPC acquired a parcel of land within the Baytown Refinery from Humble for the construction and operation of a hydrocodimer production plant known as Plancor 1909. Agreement of Lease between the DPC and Humble, dated July 21, 1943, BAYHIS-00011431-52 at BAYHIS-00011433.

101. The Agreement of Lease for Plancor 1909 was entered into between Humble and the DPC on July 21, 1943. Id.

102. In the Agreement of Lease, Humble agreed to:

> [P]repare, or cause to be prepared, and to submit to Defense Corporation and PAW, or arrange for such submission of such plans, designs, specifications and schedules as may be required for the construction, acquisition and installation of certain buildings, machinery, equipment and facilities within Lessee's Baytown refinery necessary for the hydrogenation of 8,000 barrels per calendar day of selective polymer.

Id. at BAYHIS-00011434.

103. In the Agreement of Lease, Humble further agreed:

> [U]pon approval of such plans, designs, specifications and schedules by Defense Corporation, and in the absence of disapproval of such flow sheets, plans, designs, specifications and schedules by PAW, to proceed in accordance therewith and as agent for Defense Corporation cause to be completed as soon as practicable . . . the construction and equipment of said buildings, machinery, equipment and facilities . . . or to arrange for proceeding in such manner and for the completion of the Construction Program.

Id. at BAYHIS-00011434-35.

104. The primary purpose of Plancor 1909 was to manufacture hydrocodimer, an avgas blending stock. Operating Contract Between Defense Supplies Corporation and Humble Oil & Refining Co. (Baytown Refinery) (June 1, 1944) ("Plancor 1909 Operating Contract"), BAYHIS-00023011-38.

105. Humble built Plancor 1909 in 1944 and began operating the plant in September of that year. See Def.'s Suppl. Resp. Pl.'s Interrog. No. 2 (June 14, 2013) (Baytown).

106. Pursuant to an Operating Contract, Humble agreed to operate Plancor 1909. See Plancor 1909 Operating Contract at BAYHIS-00023013.

107. There were no by-products of Plancor 1909's hydrogenation process, but wastewater was sent to the Baytown Refinery through conveyances and processed there. Expert Report of A.J. Gravel, June 18, 2012 at 57 ("Gravel Rpt.").

108. The Operating Contract stated:

> Humble will do all things necessary for the subsequent operation of the Plant for the hydrogenation of approximately eight thousand (8,000) barrels per calendar day of raw feed stocks.

BAYHIS-0023013.

109. The Operating Contract stated:

> In the operation and maintenance of the Plant, in the processing of the raw feed stocks therein, and in the performance of all other services hereunder, however, Humble shall act as an independent contractor, it being understood that Supplies shall not have the right to direct the details of such operation but is interested only in the results obtained therefrom.

BAYHIS-00023014.

110. Plancor 1909 supplied the Baytown Refinery with hydrocodimer to make avgas. Memorandum of Recommendation Re: 100 Octane Aviation Gasoline Hydrogenation, Humble Oil & Refining Company Baytown, Texas, dated Sept. 18, 1944 from G. Parkhurst et. al, PAW, BAYHIS-00003802-07 at BAYHIS-00003802-03; Def.'s Suppl. Resp. Interrog. No. 2 (June 14, 2013) (Baytown).

111. The Operating Contract and the Agreement of Lease for Plancor 1909 were both terminated in August 1945. Letter from RFC to Humble, Dec. 19, 1945, BAYHIS-00008848-49; Report of Final Accountability, Plancor 1909, Humble Oil & Refining Co. (Feb. 27, 1947) at MAA_EM-001522-1524.

112. The United States sold Plancor 1909 to Humble in October 1946. Letter dated July 1, 1946 from A. Hobson, RFC to Lt. Gen. E. Gregory, War Assets Administration BAYHIS-00011323; Memorandum to the Real Property Review Board, February 26, 1947 BAYC-00012451-70; Memorandum dated June 26, 1947 from C. Illig, Humble to H. Ferguson BAYC-00000795-96.

**C. The Baytown Ordnance Works.**

113. In February 1941, the War Department acquired from Humble a parcel of land that was adjacent to the Baytown Refinery for the construction and operation of the Baytown Ordnance Works ("BOW"). Emergency Plant Facilities and Cost-Plus-A-Fixed-Fee Construction, Equipment, and Operation Contract - War Department, dated Oct. 21, 1940, between the United States / War Department and Humble, BAYHIS-00018138-95 at BAYHIS-00018140; Letter dated July 7, 1941 from E. Kelly, Dept. of Justice to C. Illig, Humble, BAYHIS-00023281.

114. In October 1940, Humble and the United States entered into a construction, equipment, and operation contract for the BOW ("BOW Contract"). Title II of the contract was titled, "Engineering, Design, Construction and Equipping of the Plant." Under Title II, Humble, as Contractor, agreed to "furnish the labor, materials, tools, machinery, equipment, facilities, supplies not furnished by the Government, and services, and do all things necessary" (a) to furnish "all architectural and engineering services covering the design, preparation of drawings, plans, specifications and field engineering and supervision necessary for the efficient execution and coordination of the work provided for until this Title" and (b) to construct and equip on the site a plant for the manufacture of toluol. Construction, Equipment, and Operation Contract, US-BT010074-129 at US-BT010077.

115. The primary purpose of the BOW was to manufacture toluene or "toluol." Emergency Plant Facilities and Cost-Plus-A-Fixed-Fee Construction, Equipment, and Operation Contract - War Department, dated Oct. 21, 1940, between the United States / War Department and Humble at BAYHIS-00018138.

116. During WWII the BOW accounted for over 40 percent of the Nation's toluene production. "Toluene - Comparison of Production" (U.S. Army), BAYHIS-00025744-45.

117. From approximately 1941 to January 1946, the United States owned the BOW. Emergency Plant Facilities and Cost-Plus-A-Fixed-Fee Construction, Equipment, and Operation Contract - War Department",dated Oct. 21, 1940, between the United States / War Department and Humble at BAYHIS-00018140; Press Release dated Mar. 29, 1946 from War Assets Administration (1050421); Deed of Sale dated Jan. 31, 1946 from United States to Humble, BAYHIS-00019723-26; Memorandum to the Board, dated Feb. 14, 1946, from War Assets Corp., BAYHIS-00019569-84 at BAYHIS-0019571; Letter dated June 1, 1946 from J. Lockett, Kelley, Lockett & Lockett to M. Lewis, War Assets Administration, BAYHIS-00019705 (United States continued to own the underlying real property until May 31, 1946).

118. From approximately 1941 to August 1945, the U.S. Army leased the BOW to Humble to operate. "Emergency Plant Facilities and Cost-Plus-A-Fixed-Fee Construction, Equipment, and Operation Contract - War Department" dated Oct. 21, 1940 between the United States / War Department and Humble at BAYHIS-00018140; "Memorandum to the Treasurer" dated Oct. 11, 1945 from A. Hobson, Office of Surplus Supply, RFC. BAYHIS-00019119-20.

119. The BOW operated during the time period of September 1941 to August 1945. "History of the Baytown Ordnance Works" (Humble; 1943), BAYHIS-00017743-800 at BAYHIS-00017747, 00017763.

120. Humble designed and constructed the BOW using a process developed by Standard NJ. "Emergency Plant Facilities and Cost-Plus-A-Fixed-Fee Construction, Equipment, and Operation Contract - War Department" dated Oct. 21, 1940 between the United States / War Department and Humble at BAYHIS-00018144.

121. The BOW contained toluene-producing process facilities, above ground tanks, military barracks, a mess hall, air raid shelters, perimeter fencing, and four guard watchtowers. Engineering Drawing "Baytown Ordnance Works - Station 1364 - General Layout" BAYHIS-00025188; Toluene Plant - Army Ordnance: Estimated Reproduction Cost" (Moran and Fenneman; Dec. 1945) at BAYHIS-00025746-26019 at 00025971.

122. Title II of the BOW Contract stated that Humble was:

> [H]ereby authorized to do all things necessary or convenient in and about the construction and equipment of the plant under this Title II, including the employment and discharge of all persons engaged in the work hereunder (who shall be subject to the control of and constitute employees of the Contractor or its subcontractors) and the acquisition and supply of all necessary materials.

Construction, Equipment, and Operation Contract at US-BT010078.

123. Title III of the BOW Contract was called "Operation." Paragraph one of that Title provided in part that Humble:

> [S]hall perform all organization service in connection with the planning of and the making of all necessary preparations for the operation of the Plant, including the operation of the pilot plant and the training of key men, and all other services incident to setting up an efficient and going operating force.

Id. at US-BT010081.

124. Paragraph two of Title III of the BOW Contract partly provided that:

> Upon completion of the Plant in accordance with the terms of Title II hereof, the Contractor shall, acting as an independent contractor, proceed to operate it for the production of toluol in the quantity set forth in this article.

Id.

125. Pursuant to another provision in Title III of the BOW Contract, Humble was:

> [H]ereby authorized to do all things necessary or convenient in and about the maintenance, operation, alteration (not involving major extensions of or additions to the Plant for the purpose of increasing the capacity thereof set forth in Title II hereof), and the starting up or closing down of the Plant or any part thereof, including the employment or discharge of all persons engaged in the work hereunder (who shall be subject to the control and constitute employees of the Contractor), the providing of all materials (except any materials which the Government may supply), the storage of said toluol within the capacity of storage facilities of the Plant and the loading of said toluol on cars or other carriers at the Plant in accordance with the Government's shipping instructions.

Id. at US-BT010082.

126. The BOW Contract is silent on waste disposal.

127. Humble alone designed the waste disposal conveyances and equipment on site according to the best engineering standards of the time. See Def.'s Suppl. Resp. Pl.'s Interrog. No. 3 (June 14, 2013) (Baytown).

128. There is no evidence that the United States owned or took possession of wastes generated at the BOW.

129. Wastewater from the BOW was sent to the Refinery for disposal by Humble. See Gravel Rpt. at 51.

130. Humble burned acid sludge waste material generated during the BOW operations to fire the BOW boilers. Gravel Rpt. at 51.

131. According to Mr. Gravel, Humble disposed of spent catalyst in dumps at the BOW. Id. The United States did not design the dumps where spent catalyst was deposited at the BOW or request that particular method of disposal. See BOW Contract at US-BT010081.

132. The War Assets Administration sold the BOW to Humble in October 1946. Deed of Sale dated Jan. 31, 1946 from United States to Humble BAYHIS-00019723-26; Memorandum

to the Board, dated Feb. 14, 1946, from War Assets Corp., BAYHIS-00019569-84 at BAYHIS-00019571; Letter dated June 1, 1946 from J. Lockett, Kelley, Lockett & Lockett to M. Lewis, War Assets Administration, BAYHIS-00019705 (United States continued to own the underlying real property until May 31, 1946).

**D. Plancors 877 and 1384 (Baton Rouge).**

133. Plancor 877 was designed and constructed by Goodyear Tire and Rubber Company, and managed by The General Tire and Rubber Company for the production of styrene. Engineer's Final Report, Construction of Synthetic Rubber Plant, Plancor No. 877, Baytown, Texas, US-BT000721-23.

134. Plancor 1384 was cancelled before its design was completed. Consequently, the United States never acquired any land, property, or machines for Plancor 1384. Prospectus, Plancor No. 1384 (Dec. 31, 1943), US-BR000937-40.

**E. Plancor 152 (Baton Rouge).**

135. Plancor 152's Agreement of Lease was entered into on August 23, 1941, between Standard and the DPC. In a provision of that agreement, Standard agreed to "prepare or cause to be prepared, and to submit to Defense Corporation for its approval, or arrange for such submission of, such plans, designs, specifications, and schedules as may be required for the construction and equipment of the plant and the acquisition and installation of the equipment and machinery necessary" to manufacture butadiene. Agreement of Lease between DPC and Standard, dated Aug. 23, 1941, BRHIS-0001165-73 at BRHIS-00001165-66.

136. Upon approval of such plans, designs, specifications, and schedules by DPC, Standard also agreed to "complete as soon as practicable . . . the construction and equipment of the plant and the acquisition and installation of the machinery and equipment . . . or to arrange for proceeding in such manner and for the completion of the Construction Program." Id. at BRHIS-00001166.

137. On March 19, 1942, Standard and the RRC entered into an Operating Agreement for Plancor 152. In that agreement, Standard agreed to "undertake all preparations necessary for the subsequent operation of the Plant for the production of butadiene . . . . " Operating Agreement between RRC and Standard, dated March 19, 1942, BRHIS-0001360-91 at BRHIS-00001361.

138. A separate provision of the Operating Agreement stated that Standard's "costs" in producing butadiene shall include, *inter alia*, the "cost of disposing of all waste solids, by-products, liquids and gases resulting from manufacturing operations at the Plant and the cost of disposing of worn-out or obsolete equipment, junk and debris." Id. at BRHIS-00001370.

139. The Operating Agreement and Lease Agreement for Plancor 152 were cancelled in June 1948. Protection and Maintenance Contract between RFC and Standard, dated July 1, 1948, BRHIS-00001409-11 at BRHIS-00001411.

**F. Plancor 572 (Baton Rouge).**

140. Plancor 572 was a plant that Standard had started constructing before entering into a contract with the United States. An Agreement of Lease for Plancor 572 was entered into on April 20, 1942, between Standard and the DPC. In that Agreement, Standard agreed to "convey and transfer to Defense Corporation said site and buildings" that Standard was "now in the process of constructing for its own account," along with any machinery, equipment and materials installed or purchased in connection therewith and located on said site. Agreement of Lease between DPC and Standard, dated Apr. 20, 1942, BRHIS-00015858-68 at BRHIS-00015859.

141. Standard further agreed to "prepare or cause to be prepared, and to submit to Defense Corporation for its approval, or arrange for such submission of, such plans, designs, specifications, and schedules as may be required for the construction and equipment of the Plant and the acquisition and installation of the equipment and machinery necessary to" manufacture butyl rubber. Id. at BRHIS-00015860.

142. Moreover, upon approval of such plans, designs, specifications and schedules by Defense Corporation, Standard agreed to "complete as soon as practicable . . . the construction and equipment of the Plant and the acquisition and installation of the machinery and equipment . . . or to arrange for proceeding in such manner and for the completion of the Construction Program." Id.

143. The Operating Agreement for Plancor 572 was entered into on July 9, 1942, between Standard and the RRC. The Operating Agreement provided, in part, that Standard "shall undertake all preparations necessary for the subsequent operation of the Plant for the production of Butyl rubber . . . ." Contract between RRC and Standard, dated July 9, 19443, US-BR003734-889 at US-BR003859.

144. A separate provision of the agreement stated that Standard's "costs" in producing butyl rubber shall include, *inter alia*, the "cost of disposing of all waste solids, by-products, liquids and gases resulting from manufacturing operations at the Plant and the cost of disposing of worn-out or obsolete equipment, junk and debris." Id. at US-BR003871.

145. The United States sold Plancor 572 to Standard in April 1955. From the end of 1945 until the final sale of the Plancor, Standard operated the plant under the terms of an Operating Agreement dated March 1, 1943, as amended. Memorandum to Mr. G. I, Irwin (Dec. 15, 1955), US-BR005349-71 at US-BR005367.

**G. Plancor 1065 (Baton Rouge).**

146. On June 23, 1942, Standard and the DPC entered into an Agreement of Lease for Plancor 1065. In the Agreement of Lease, Standard agreed to "prepare, or cause to be prepared, and to submit to Defense Corporation and to the War Department for their approval such plans, designs, specifications, and schedules for the construction and equipment of such additional plant, which plant is to be designed to produce approximately seven million (7,000,000) gallons per year of toluene . . . and the acquisition and installation of the Machinery . . . as they may require." Agreement of Lease between Standard and DPC, dated June 23, 1942, BRHIS-00003016-28.

147. Under the Agreement of Lease, upon approval of such plans, designs, specifications, and schedules by Defense Corporation and the War Department, Standard agreed to "complete as soon as practicable the construction and equipment of the Plant and the acquisition and installation of the Machinery." Id. at BRHIS-00003017.

148. Although Plancor 1065 was originally designed for toluene production, plans changed and the plant's construction was modified for the production of xylenes, an avgas component. Engineer's Final Report of Reconstruction Finance Corporation (Dec. 31, 1945) BRHIS-00000360-460 at BRHIS-00000361.

149. In a letter agreement dated March 14, 1944, the PAW authorized Standard to operate Plancor 1065 for the production of one or more avgas components subject to the terms and provisions of the Aviation Gasoline Reimbursement Plan. Amended Agreement of Lease between DPC and Standard, dated Nov. 1, 1943, BRHIS-00002884-99 at BRHIS-00002886.

150. The United States sold Plancor 1065 to Samuel C. Rudolph and Associates, Inc., in July 1949. Standard acquired the site and facilities formerly comprising Plancor 1065 from another private third party in September or October 1950. Insurance Coverage on Plancors 1065 and 1863 (Jan. 5, 1950), US-BR000083; Letter from W.B. Holcombe to O.J. Boatwright (Jan. 9, 1951), US-BR000323; Letter from A.L. Schwarz to H.J. Voorhies (June 23, 1953), BRC-00003872-87 at BRC-00003876-77.

**H. Plancor 1355 (Baton Rouge).**

151. Standard and the DPC entered into an Agreement of Lease for Plancor 1355 on February 18, 1943. Agreement of Lease between DPC and Standard, dated Feb. 18, 1943, BRHIS-00015355-67.

152. A "Whereas" clause of the Agreement of Lease stated that Standard:

> [O]wns an oil refinery at or near Baton Rouge, Louisiana, a portion of which can be so modified and changed and with the installation therein of certain additional machinery and equipment, facilities can be provided for the manufacture of approximately six thousand eight hundred (6,800) short tons of butadiene per year. . . .

Id.

153. The Agreement of Lease partly provided that Standard agreed to:

> [P]repare or cause to be prepared, and to submit to Defense Corporation for its approval, or arrange for such submission of such plans, designs, specifications and schedules as may be required for the modification of its existing Refinery and the acquisition and installation of additional machinery and equipment . . . in order to establish facilities to manufacture butadiene.

Id. at BRHIS-00015357.

154. Upon approval of such plans, designs, specifications and schedules by Defense Corporation, Standard additionally agreed to "complete as soon as practicable . . . the modification of its existing facilities and the acquisition and installation of the additional machinery and equipment . . . or to arrange for proceeding in such manner and for the completion of the Acquisition Program." Id.

155. On March 1, 1943, Standard and the RRC entered into an Operating Agreement for Plancor 1355. Pursuant to the Operating Agreement, Standard agreed to "undertake all preparations necessary for [the equipment's and facilities'] subsequent operation for the production and purification of butadiene . . . ." Operating Agreement between RRC and Standard, dated Mar. 1, 1943, US-BR004414-599 at US-BR004560.

156. The Operating Agreement also included in Standard's "costs" in producing butadiene shall include, *inter alia*, the "cost of disposing of all waste solids, by-products, liquids and gases resulting from manufacturing operations at the Converted Plant and the cost of disposing of worn-out or obsolete equipment, junk and debris." Id. at US-BR004574.

157. The United States sold Plancor 1355 to Standard effective January 1, 1949. Letter from RFC to Standard (Dec. 31, 1948), US-BR000911-14; Resolution between RFC and Standard, dated Mar. 14, 1949, US-BR000909-10; Letter from Standard to RFC (Oct. 28, 1949), US-BR004419-20.

**I. Plancor 1526 (Baton Rouge).**

158. Standard and the DPC entered into an Agreement of Lease for Plancor 1526 on February 20, 1943. Under the terms the Agreement of Lease, Standard agreed to:

> [P]repare or cause to be prepared, and to submit to Defense Corporation for its approval, or arrange for such submission of, such plans, designs, specifications and schedules as may be required for the construction and equipment of the plant and the acquisition and installation of the equipment and machinery necessary to" manufacture catalyst 1707.

Agreement of Lease between DPC and Standard, dated Feb. 20, 1943, BRHIS-00004972-82 at BRHIS-00004972-73.

159. Upon approval, Standard also agreed to "complete as soon as practicable . . . the construction and equipment of the plant and the acquisition and installation of the machinery and equipment . . . or to arrange for proceeding in such manner and for the completion of the Construction Program." Id. at BRHIS-00004973.

160. The Operating Agreement for Plancor 1526 was entered into on June 26, 1943, between Standard and the RRC. In the Operating Agreement, Standard agreed to "undertake all preparations necessary for the subsequent operation of the Plant for the production of 1707 catalyst, including the training of personnel and the testing and operation of the Plant or portions thereof, prior to final completion of the Plant." Operating Agreement between RRC and Standard dated June 26, 1943, US-BR003977-4049 at US-BR004031.

161. The Operating Agreement included in Standard's "costs," the "cost of disposing of all waste solids, by-products, liquids and gases resulting from manufacturing operations at the Plant and the cost of disposing of worn-out or obsolete equipment, junk and debris." Id. at US-BR004037.

162. In June 1950, the property of Plancor 1526 was transferred to the account of Plancor 572, which was later sold to Standard (SOF No. 145), and Plancor 1526 was dismantled towards the end of 1950. BRC-00003876-77; BRC-00010976-80.

**J. Plancor 1868 (Baton Rouge).**

163. Plancor 1868 involved a plant that Standard had started constructing before entering into a contract with the United States. Standard and the DPC entered into an Agreement of Lease for Plancor 1868 on November 23, 1943. Agreement of Lease between DPC and Standard, dated Nov. 23, 1943, BRHIS-00000023-79 at BRHIS-000000259.

164. A "Whereas" clause of the Agreement of Lease stated that Standard was:

> [W]illing to arrange for the design, installation, construction, and provision of all the necessary machinery, equipment, buildings and other facilities necessary for the expansion of [its] existing hydrogenation facilities for the manufacture of aviation gasoline components and necessary for the manufacture, storage and shipping of C-S at [its] Baton Rouge Refinery, such machinery, equipment, buildings and other facilities being hereinafter called 'Defense Plant Facilities.'

Id. C-S was a new specification for avgas. See SOF No. 178.

165. Another portion of the Plancor 1868 Agreement of Lease provided that Standard agreed to "prepare, or cause to be prepared, and to submit to Defense Corporation and PAW process flow sheets, plans, designs, specifications, and schedules for the construction of the Defense Plant Facilities . . . ." Agreement of Lease at BRHIS-00000061.

166. Moreover, upon approval, the Agreement of Lease stated that Standard agreed to "complete or arrange for the completion as soon as practicable, of the construction of the Defense Plant Facilities . . . ." Id.

167. A "Whereas" clause of the Plancor 1868 Agreement of Lease stated that the Secretary of War had written a letter to Standard's president requesting that "the appropriate subsidiary companies of the Standard Oil Company (N.J.) be instructed – 'to proceed with all possible dispatch with the necessary steps to supply 1,000 barrels of C-S per day from the larger Baton Rouge hydrogenation plants of Standard Oil Co. of Louisiana at the earliest possible date.'" Id. at BRHIS-00000059.

168. The United States sold Plancor 1868 to Samuel C. Rudolph and Associates in July 1949. Standard subsequently acquired portions of the property, buildings and equipment that had comprised Plancor 1868. Letter from T. L. Peyton to H.C. Plummer (June 19, 1953), MAA_EM-002820-2826.

## VI. Facts Related to the United States' Presence at Baytown and Baton Rouge.

169. During WWII, Exxon made personnel decisions and its line staff actually performed the work at the Refineries. See, e.g., Gravel Dep. Vol. I, 128:18-129:11; Gravel Dep. Vol. II, 476:5-6; Brigham Dep., 490: 14-16, 21-24; Letter from H. Baker to S.T. Crossland (Sept. 28, 1943), BAYHIS-00020255-56; General Statement of Critical War Product Operations, BAYHIS-00006663-64 ("We have genuine pride in the achievements at Baytown, which have been brought about by . . . the ingenuity and initiative of the operators, technical men, and engineers, and the loyalty and industry of our 5,100 employees.").

170. The Avgas Contracts did not provide any authority to the United States to make personnel decisions at the Sites. Baytown Avgas Contract at BAYHIS-00010202-19; Master Avgas Contract at MIS-00022185-214.

171. There is no evidence that the United States made or attempted to make personnel decisions at the Sites during WWII or the Korean War. Gravel Dep. Vol. I, 375:21-376:16.

172. The Avgas Contract provided that the Exxon had to provide certificates of inspections from licensed inspectors as to product quality and quantity although the United States could waive this requirement and inspect the avgas upon delivery. Baytown Avgas Contract at BAYHIS-00000593-95; Master Avgas Contract at MIS-00022201.

173. There is no evidence that the United States inspected the Baytown or Baton Rouge Refineries during the Korean War.

174. There is no evidence that the United States operated equipment at the two Refineries, supervised Humble or Standard employees in their day-to-day operation of the two Refineries, or made personnel or labor-related decisions at the two Refineries. See generally Gordon Testimony, 11284:1-6 at US-GEN012139; L. Goldsmith Dep. Tr. 213:17-214:21 (Vol. II, June 10, 1992), United States v. Shell Oil Co., No. CV-91-0589 RJK (C.D. Cal.); B. Dunbar Dep. 105:13-106:1 (Aug. 18, 1992), United States v. Shell Oil Co., No. CV-91-0589 RJK (C.D. Cal.) (former Shell Oil Company employee testified that he was not aware of any instances where the United States "told Shell employees how to do their job" or "hired or fired employees at Shell").

175. There is no evidence that the United States provided engineering or design expertise, raw materials, equipment, or construction labor at either Refinery. See generally Gordon Testimony, 11265:0-19, 11284:7-11 at US-GEN012138-39.

176. There is no evidence that the United States provided equipment for use at the two Sites during the Korean War.

177. There is no evidence that any United States personnel had ever been regularly stationed at the refineries, other than at the BOW. Gravel Dep. Vol. II, 418:10-419:21.

178. Other than at the Baytown Ordnance Works, the only evidence of any United States representative being stationed at either site is a September 1943 letter indicating that "an Ordnance Department inspector will be stationed at the Baton Rouge Refinery . . . to inspect C-S and handle Defense Supply Corporation shipments of this product." Letter from J. T. Murchison to G. Stoner (Sept. 24, 1943), MIS-00014695. At the time, C-S was a new specification for avgas. Letter from E.D. Cumming to G. Hill (Aug. 14, 1943), MIS-00014691.

179. Various DSC and PAW representatives made periodic visits to the Refineries, but there is nothing in the record to suggest that they ever directed waste disposal decisions during their visits. Gravel Dep. Vol. II, 419:9-420:11. Nor is there any documentary evidence that any

United States personnel directed the workforce with respect to production during these visits. Id. at 419:9-420:17.

180. A representative from the Army or Navy inspected each of the approximately 55 high-octane avgas manufacturing refineries in September 1945 with the sole purpose being "that if all specifications were complied with the inspector would be authorized to accept the entire volume available." PAW Interoffice Commc'n (Sept. 11, 1945) at MIS-00000375-76.

181. Mr. Brigham stated that the focus of government inspections during WWII was to assess the quality of the product. Brigham Dep., 491:3-19.

182. Mr. Gravel stated that if the United States wanted to control the day-to-day operations of the Refineries during WWII, it could require Standard and Humble's current employees to continue to operate the Refineries, or it could lease the Refineries to one of Standard or Humble's competitors. Gravel Dep. Vol. II, 475:5-477:5; see also Brigham Dep., 262:24-263:2, 263:20-264:1.

183. The United States lacked the manpower to operate the Refineries even if it wanted or had the capabilities to do so. See, e.g., Frey & Ide, A History of the PAW at MIS-00022376. Mr. Gravel stated that the United States had only "two remedies . . . if [it] really wanted to go in and run the day-to-day operations": the United States could require existing personnel to continue working or lease the facility to another company to operate. Gravel Dep. Vol. II, 475:5-477:5; see also Brigham Dep. 262:25-263:2, 263:20-264:1 (explaining that a facility's workers continued to operate after seizure or else the United States had to turn over the operation of the seized facility to another company).

184. There is no evidence that the United States seized the Baytown and Baton Rouge Refineries, or that the Refineries experienced any labor issues or other problems that would have interfered with production during WWII or the Korean War. Gravel Dep. Vol. I, 375:21-376:16.

185. Exxon employees staffed the Plancors. See, e.g., BAYC-00001491 ("The personnel of [Plancor 485] was originally drawn from the trained personnel of the Baytown Refinery."); BAYHIS-00023014 ("Humble will supply all labor . . . required for one necessary in connection with the operation and maintenance of [Plancor 1909] . . . All employees and personnel provided by Humble in connection with the performance of its obligations hereunder shall be employees of Humble and not of Supplies."); BAYC-00000658 ("Humble people also ran the Government-owned Butyl Plant").

186. Exxon personnel also ran the machinery and equipment and carried out the daily operations of the Plancors. Gravel Dep. Vol. II, 400:8-17.

187. United States personnel made periodic visits to the Plancors, but only during the construction phase. Gravel Dep. Vol. II, 419:9-420:17. There is no evidence that any United States employees directed waste disposal decisions during these visits. Gravel Dep. Vol. II, 419:9-420:11.

188. No United States personnel were stationed at the Plancors on a daily basis. Gravel Dep. Vol. II, 418:10-20.

189. In the early 1940s the U.S. Army stationed an infantry company at the BOW to secure and protect the plant. Baytown Ordnance Works Vol. I-A thru V-A - Summary of Basic History thru 31 December 1943, BAYHIS-00017861-98 at BAYHIS-00017887; Gravel Dep. Vol. II, 424:10-13.

190. The BOW contained two Army barracks buildings and a mess hall for the U.S. Army personnel stationed at the plant. Request for Proposal dated July 2, 1946 from W. Pearson, War Assets Administration BAYHIS-00019815-17; Bill of Sale dated Jan. 31, 1946 from the War Assets Administration to Humble BAYHIS-00019140-41; Engineering Drawing "Baytown Ordnance Works - Station 1364 - General Layout" BAYHIS-00025188.

191. Personnel from the Ordnance Department of the U.S. Army inspected and accepted the toluene deliveries at the BOW but made no decisions about waste disposal. See, e.g., Baytown Ordnance Works, Description Sheet (Jan. 1942) at US-BT012209; J. Mutchison, Acceptance Sheet (Jan. 21, 1942) at US-BT012207.

192. Internal Humble correspondence in September 1943 stated that the "administrative load in connection with operations has been abnormal because of the Ordnance Department's efforts to administer many affairs which, under the terms of the Contract appear to be the Contractor's prerogative." The letter further stated that Humble personnel at the BOW were:

> [S]ubjected to a steady stream of orders from [Ordnance's St. Louis office] stating how various phases of the business should be conducted and specifying numerous reports to be submitted daily, weekly, and monthly to St. Louis covering personnel, absenteeism, average hourly rates, overtime payments, production quotas, maintenance costs, warehouse inventories on a dollar basis (including catalyst as a spare part), etc.

Letter from G.S. Bays, Jr. to H.W. Ferguson (Sept. 24, 1943), BAYHIS-00016626-32.

193. By 1943 the U.S. Army replaced the infantry company with a U.S. military police unit, which was also stationed at the Ordnance Works for the purpose of securing and protecting the plant. "Baytown Ordnance Works Vol. I-A thru V-A - Summary of Basic History thru 31 December 1943," BAYHIS-00017861-98 at BAYHIS-00017868-69.

194. Mr. Gravel presumed that if anything would have gone wrong regarding production, the military personnel would have taken action, but he did not identify any documents in the historical record showing that any military personnel were directing or involved in production. Indeed, correspondence suggests that the military personnel at the BOW dealt with administrative issues. Gravel Dep. Vol. II, 420:18-424:4.

195. There is no evidence that United States personnel ran the Refineries' waste disposal equipment, designed waste disposal systems, or made decisions about waste treatment or handling. See, e.g., Gordon Testimony, 11285:4-14 at US-GEN012140.

196. There is no evidence that, during the Korean War, anyone other than Exxon employees staffed the Refineries, provided or operated any Refinery equipment, or supervised the Refinery workforce.

197. There is also no evidence that, during the Korean War, United States employees were ever stationed at the Refineries or conducted visits to direct production or waste disposal activities.

**VII. Facts Related to Waste Disposal at Both Sites.**

198. The Avgas Contracts do not contain any provision regarding waste disposal at the Refineries. Baytown Avgas Contract at BAYHIS-0010102-19; Master Avgas Contract at MIS-00022185-210; Brigham Dep., 492:2-5.

199. Mr. Gravel could not recall any specific provision of the Avgas Contracts that dealt with the disposal of wastes generated in the production of avgas. Gravel Dep. Vol. I, 283:19-284:4. Nor did he uncover any documents in the historical record suggesting that when the parties entered into the Avgas Contracts, they considered the environmental effects of avgas production. Gravel Dep. Vol. II, 498:4-9.

200. There is no evidence that the United States designed or provided equipment involved in waste handling or disposal at the Baytown and Baton Rouge Sites during WWII or the Korean War. See, e.g., Gordon Testimony, 11234:4-14 at US-GEN012140.

201. Humble and Standard designed and constructed their own waste disposal processes and equipment. E.g., PAW Form 30, Serial No. 122,856 dated Feb. 1, 1944 from Maj. S. Wilk to Humble, BAYHIS-00012658; US-BR006092-93; US-BR0006094-97; Brigham Dep., 491:15-18.

202. Mr. Gravel identified just two instances where he thought the United States was directly involved in waste disposal at the Refineries: (1) PAW's finding that requested raw materials could not be spared for Humble to build a temporary acid sludge burning facility at Baytown while Humble completed other, approved construction to handle acid waste, and (2) the WPB's denial of Standard's request to allocate raw materials to build a master separator at Baton Rouge even though it allowed two additional projects to move forward. Gravel Dep. Vol. II, 410:13-411:16, 416:15-417:12.

203. In both instances, Mr. Gravel acknowledged that United States was allocating scarce raw materials and that the companies proposed the projects of their own design. Gravel Dep. Vol. II, 411:11-21.

204. Other than the United States' regulatory role in denying Exxon's request for priority assistance for materials, Mr. Gravel was only aware of one instance at the Refineries where he thought the United States was involved in telling Exxon how to design waste disposal: the United States Army Corps of Engineers' ("Corps") approval of Standard's overall plans to address river pollution problem at the Baton Rouge Refinery, which the Corps had complained of in its capacity as the agency charged with enforcing the Rivers and Harbors Act (see SOF No. 246). Gravel Dep. Vol. II, 417:13-418:6.

205. Exxon has not identified a single fact regarding the United States' involvement with waste disposal or environmental compliance at the Refineries during the Korean War. Pl.'s Resp. to Def.'s Interrog. No. 3 (July 13, 2011) (Baytown); Pl.'s Resp. to Def.'s Interrog. No. 3 (Jan. 26, 2012) (Baton Rouge).

**A. Exxon's Waste Disposal at Baytown.**

206. The Operating Agreements with the RRC and General Instructions Regarding Procedure or Administrative Procedure required Humble and Standard to request approval from the RRC for certain contracts and arrangements. See, e.g., RuR Form B-4 (June 20, 1944), BAYHIS-00006355-59; Memo from Cecil Duncan to W. N. Munster (Apr. 30, 1951), BRC-00004299.

207. For example, during WWII, Humble submitted an authorization request to the RRC dated June 20, 1944, seeking approval to provide a sewer pumpout system for Plancor 485's sewer system. RuR Form B-4, BAYHIS-00006355-6358.

208. Attached to the June 1944 authorization request was a justification for the work, prepared on Humble's letterhead, and an estimate of the proposed work. Id. at BAYHIS-0006356.

209. Humble's justification for Plancor 485's sewer pumpout system provided, in part:

> At the present time there is no provision for pumping out the sewer line from the GF Section and liquid which reaches the sewer system either by leakage, line failure, or failure of any of the operating equipment is carried through the sewer system to the [Plancor 485] oil separator and from there into Scott's Bay. Upon occasions small quantities of copper bearing solvent solution have been carried through the sewers from the GF Section into the oil separator. This copper bearing solvent is very deadly to marine life. Any moderate losses of this solvent through the sewer system might result in killing marine life in Scott's Bay. The regulations of the State of Texas Game, Fish, and Oyster Commission are quite stringent with regard to petroleum or chemical pollution of waterways, and imposes severe penalties for violation of the regulations. Therefore, it is imperative that all reasonable steps be taken to prevent such pollution with its subsequent detrimental effect on the marine life in the waterways where the effluent from this plant is discharged.
>
> It is felt that the use of the pumpout system as outlined above will largely eliminate any possibility of copper bearing solvent solution from the GF Section reaching Scott's Bay and it is, therefore, requested that this estimate be approved.

Id.

210. Humble stated that, upon approval of the estimate, its maintenance forces would perform the work. Id.

211. Mr. Gravel did not know the technical knowledge of United States' personnel who approved Exxon's authorization requests. Gravel Dep. Vol. II, 409:17-410:12.

212. In a December 14, 1944, letter, Humble wrote to van Nouhuys & Company about a contract for spent catalyst at Baytown. Humble asked van Nouhuys & Company for a statement that the company was "not now paying or contracted to pay to any sources other than Baytown Ordnance Works a higher price than is proposed in our Contract TO-8." Humble wanted assurance that it was "receiving as much for our Catalyst as you are paying others for like quality." Letter from F. A. Watts to D.P. van Nouhuys (Dec. 14, 1944), BAYHIS-00011729.

213. A June 26, 1945, letter from Humble to the RRC described an arrangement whereby Humble agreed to credit RRC for spent acid delivered from Plancor 1082 to the Baytown Refinery. Letter from H. Baker to S.T. Corssland (June 26, 1945), BAYHIS-00022623-24.

214. Humble had been using the spent acid delivered from Plancor 1082 at its Baytown Refinery. Id.

215. Humble reserved the right to stop receiving the spent acid from Plancor 1082 if Humble was unable to utilize the spent acid at its Baytown Refinery. Id.

216. Humble maintained an acid balance at the Baytown Refinery. If Humble received more spent acid from Plancor 1082 than it could process, it had to sell an equivalent amount of spent alkylation acid from the Refinery. Id.

217. Starting in May 1945, Humble was unable to use the spent acid at its Baytown Refinery, resulting in Humble having to dispose of surplus acid at the Refinery at prices "considerably below" the amount that Humble was crediting RRC. Id.

218. In early 1944, Humble requested priority assistance from the United States to install acid burning facilities at the Baytown Refinery. Humble stated that the facilities were needed due to the possibility of not having sufficient acid reconcentration capacity during a period when new acid concentration facilities were under construction and when part of the present facilities were being completely overhauled. Humble further maintained that, if such occurred, a failure of any of the present acid concentration facilities would leave the Refinery "considerably short of acid disposal means since the present ones for burning are not adequate to carry the possible increased load." PAW Form 30, Serial No. 122,856 dated Feb. 1, 1944 from Maj. S. Wilk to Humble, BAYHIS-00012658.

219. Humble's requested acid sludge burning project would involve "the installation of approximately 2400' of 4" steel pipe to be constructed with secondhand furnace tubing, installation of a 9' x 12" secondhand steel tank, two available steam pumps, necessary instruments, fuel piping and burner changes at boiler house." The total cost amounted to $19,000, $9,000 of which was for material and equipment and $10,000 for labor. Id.

220. At the time Humble submitted its early 1944 request, the United States had previously approved Humble's request for materials to build new acid concentration facilities. In its prior request to the United States for those new facilities, Humble had pointed out that "if new acid concentration facilities were approved it would not be necessary to install additional acid burning equipment." Id.

221. Therefore, on February 1, 1944, the United States recommended denial of Humble's early 1944 request, since it appeared that the "facilities requested in this application will only serve to tide the applicant over a short period in which these facilities would be required only in case of a failure of existing acid concentrating facilities. Furthermore, the possibility of delaying complete overhauling of the present facilities appears to offer a means of obliterating the need for the requested acid burning facilities." Id.

222. The United States' denial in this instance was based on the need to allocate certain materials that Exxon wanted to use to build the new facilities. Gravel Dep. Vol. II, 410:13-412:10.

223. Sulfuric acid was used to treat motor and aviation gasoline as well as a catalysts in alkylation. Following such treatment, a layer of sulfuric acid containing hydrocarbons and other sludges would settle to the bottom of the tank and be removed. The sulfuric acid mixture would further separate until the sludges could be removed and burned in a boiler to generate steam. The sulfuric acid was recycled for further use until it became too diluted, at which time it went to an acid concentration facility to be concentrated, *i.e.*, the water boiled off for reuse. The incineration of acid sludge for steam would have generated sulfuric dioxide air emissions and ash. The concentrating process would not have generated wastes. OPC, Sulfuric Acid Survey (Aug. 8, 1942), US-SH60418-45 at US-SH060418, US-SH060430; Letter from H.H. Meyer to H.W. Ferguson (May 12, 1944), BAYHIS-00005510-13; History of Baytown Refinery's Activities and Water Pollution Control, BAYC-00000106-16; Oil and Gas Journal (Oct. 12, 1959), BAYC-00013632-36 at BAYC-00013635.

224. Exxon has not claimed that it had to clean up ash generated from the incineration process. See, e.g., Pl.'s Resp. Def.'s Interrog. No. 1 (July 13, 2011) (not identifying waste from the incineration of acid in list of hazardous substances "treated and/or disposed of" at Baytown).

225. There is no evidence that the back-up acid sludge burning facility would have affected the amount of ash generated or its ultimate deposition.

226. Humble continued to sell excess spent acid to third parties or incinerate it in boilers to make steam. BAYHIS-0005510-13; OPC, Sulfuric Acid Survey (Aug. 8, 1942) at US-SH060418; US-SH060430; H. Baker of Humble Oil & Refining Co., to S. Crossland of OPC (June 26, 1945) at BAYHIS-00022623-24.

227. In 1944 Humble obtained PAW's approval to modify the sewer lines that were connected to the West Drainage Ditch at the Baytown complex. H. Baker, Humble Oil & Refining Co., to G. Parkhurst, PAW (May 12, 1944) at BAYHIS-00008826-29.

228. After WWII, Humble started investigating disposal problems at its Baytown Refinery. S.O. Brady, Effluent Improvement Program at Humble's Baytown Refinery, BAYC-00013616; History of Baytown Refinery's Activities and Water Pollution Control at BAYC-00000107. Specifically, 1946 marked the beginning of a concerted program for air and water conservation at the Baytown Refinery. History of Baytown Refinery's Activities and Water Pollution Control at BAYC-00000106.

229. In 1946, Humble initiated a comprehensive study of the Baytown Refinery's waste disposal facilities and problems, which was completed in 1947. The study revealed that the Refinery's existing facilities for handling water effluent were overloaded. As a result, in 1947, Humble formulated a stepwise program, called the Effluent Improvement Program, for improving pollution control at the Refinery. This program was a 5-year planned investment program totaling nearly $5,500,000 for improved water effluent handling facilities. History of Baytown Refinery's Activities and Water Pollution Control at BAYC-00000107. The program was completed in 1957. Id. at BAYC-00000113.

230. Post-WWII, Humble initiated a program for the expansion and improvement of waste handling facilities at the Baytown Refinery. Eight principal items were included in the program: (1) sanitary sewage collecting and treating system, (2) modernization of main oil-water separator, (3) elimination of salt water for cooling, (4) collection and concentration of spent caustics, (5) reduction of temperature, (6) effluent filtration and flocculation unit, (7) sulfide removal unit, and (8) changes in sewer and separator system. Effluent Improvement Program at Humble's Baytown Refinery at BAYC-00013616-20.

231. In 1949, Humble placed in operation a sanitary sewage gathering system and treating plant at the Baytown Refinery. History of Baytown Refinery's Activities and Water Pollution Control at BAYC-00000108.

232. In 1950, Humble modernized Separator 10, the Baytown Refinery's main oil-water separator. Id.; Effluent Improvement Program at Humble's Baytown Refinery at BAYC-00013617.

233. In 1951, Humble constructed sewers to connect the drainage system in the north tank farm and the east trunk sewer into Separator 10. History of Baytown Refinery's Activities and Water Pollution Control at BAYC-00000109.

234. In September 1951, Humble placed in operation an effluent filtration and flocculation unit that was constructed as part of Humble's Effluent Improvement Program. Effluent Improvement Program at Humble's Baytown Refinery at BAYC-00013617; History of Baytown Refinery's Activities and Water Pollution Control at BAYC-00000110. This unit was installed to handle several serious problems related to effluent quality. History of Baytown Refinery's Activities and Water Pollution Control at BAYC-00000110.

235. In 1952, Humble constructed sewers at the Baytown Refinery to send effluent waters entering Separator 2 to Separator 10. Effluent Improvement Program at Humble's Baytown Refinery at BAYC-00000109.

236. At the Baytown Refinery, Humble constructed preseparation flume 13 in 1951 and preseparation flume 14 in 1954. Id.

237. In 1953, Humble had requested authorization from the RFC to expend money to repair waste heat boilers at Plancor 485. BAYC-00001596-600. Included in the request was an explanation of the need for the repair, which was signed by Humble employee H. H. Attaway, Letter from A. L. Schwarz to H.W. Ferguson (Oct. 30, 1952), BAYC-00001853, and addressed to Humble Chief Refinery Engineer E. Voss. Letter from A.L. Schwarz to H.w. Ferguson (Oct. 2, 1952), BAYC-00008778-805 at BAYC-00009780, Letter from G.J. Irwin to H.W. Ferguson (Aug. 13, 1953), BAYC-00001592-619 at BAYC-00001598. The explanation for the waste heat boilers provided in part:

> These vessels are part of the original plant equipment and were placed in operation in August of 1943. Both units are inspected periodically on the hydrocarbon side (tube) and have been inspected on thirteen different occasions during the last nine years of operation. . . . During several of the inspections even as early as 1944, hydrostatic tests revealed a number of the tubes to be leaking on the inlet end of the boiler.
>
> On April 13, 1953, these two waste heat boilers were removed from service for retubing and repairs as originally planned and after all tubes had been removed an internal inspection revealed the tube shoots on the inlet end of both units to be severely corroded in the area behind the conical reinforcing ring where the tube shoot is welded to the shell. . . . .Repairs included replacing both inlet tube shoots and rebuilding both 74" I.D., inlet flanges and replacing the conical reinforcing rings.
>
> In view of the foregoing, Humble recommended that the estimate be approved.

Letter from G.J. Irwin to H.W. Ferguson (Aug. 13, 1953), BAYC-00001607.

**B. Exxon's Waste Disposal at Baton Rouge.**

238. Standard received suggestions for "some sort of earthen separator" at the Baton Rouge Refinery as early as 1931. J. E. Miller, Master Separator in Callaghan Bayou (Sept. 10, 1946), BRHIS-00014109-12 at BRHIS-00014110-11.

239. As far back as 1937, Standard had received engineering estimates for a master separator for Callaghan's Bayou, near the Baton Rouge Refinery. Master Separator in Callaghan Bayou at BRHIS-00014109; Gravel Dep. Vol. II, 444:13-445:14.

240. In December 1938, Standard's Engineering Department at the Baton Rouge Refinery conducted a survey, "Survey of Separators and Sewers." Standard, Survey of Separators and Sewers (Dec. 14, 1938), BRC-00028304-08; Gravel Dep. Vol. II, 444:13-445:14. The survey discussed the "present separator and sewer situation, with particular reference to accumulating certain data which will be used in determining separator and sewer capacities, and which will indicate the extent of pollution now existing." Survey of Separators and Sewers at BRC-00028304.

241. Standard's Engineering Department at the Baton Rouge Refinery conducted a study, dated July 1939, called "Study of Separators and Pollution." Among other things, this study documented miscellaneous work to date on the Refinery's separators, skimming facilities, and sewers, and identified additional related items under consideration for implementation. Standard, Study of Separators and Pollution (July 26, 1959), BRHIS-00014013-16.

242. In September 1939, Standard's Engineering Department at the Baton Rouge Refinery conducted another study, entitled "The Effect of Intermediate Baffles and Distribution Walls in Gravity Type Oil-Water Separators." The study was done "primarily for the purpose of designing a new separator which could be considered a standard piece of equipment to function more efficiently than the present design separators." Additionally, "the fundamental principles and conclusions set forth could be used to advantage in revamping present separators to obtain more effective separation, if the necessary changes could be economically justified over a new installation." Standard, The Effect of Intermediate Baffles and Distribution Walls in Gravity Type Oil-Water Separators (Sept. 7, 1939), BRHIS-00014017-20 at BRHIS-00014017.

243. The authors of the 1939 study explained that the study was "set forth for the purpose of improving the effectiveness of separation in our Baton Rouge Refinery separators by making certain changes to the present construction." Id. Standard thus planned "changes in the separators" in 1939 upon discovering the "escape of oil to the river." See M. Amis to J. Warner, Refinery Separators (Sept. 1939) at BRC-00028314.

244. As of 1944, the "disposal of Refinery wastes ha[d] been recognized as a serious problem for a number of years" at the Baton Rouge Refinery. River Pollution Control Problem (July 24, 1944), US-BR006092-93 at US-BR006092.

245. "Specific complaints of obvious contamination of the [Mississippi] river" near the Baton Rouge Refinery discharge point were sent to Standard by the Corps in 1944. Petroleum Technical Service, Background on Esso's Silt Disposal Problem (Mar. 18, 1959), BRC-00022731-33 at BRC-00022731.

246. On January 29, 1944, the Corps conducted a preliminary investigation of the Baton Rouge Refinery. That investigation "revealed oil in considerable quantity escaping into the Mississippi River" from the Refinery "in violation of Section 13 of the River and Harbor Act of 3 March 1899." Letter from George H. Hudson, United States Engineer Office, to Standard dated January 31, 1944, BRC-00028283.

247. Upon its initial investigation, the Corps further stated that:

> It appears that your personnel is either ignorant of, or has little respect for, the law in that defective equipment is used, pumps are not operated full time and the proper number of drains has not been installed to drain off the accumulated oil at the gate and the baffles and, further, that leaks, overflows and spillage over the plant area cause excess pollution of the Mississippi River after each rain.

Id.

248. The Corps indicated that it would conduct another investigation of the Baton Rouge Refinery in the near future. Unless the river pollution was abated, the Corps stated that it would report the matter to the U.S. District Attorney for proper action. Id.

249. As a result of the Corps' January 1944 investigation, C. H. Bunn and L. W. Schrader visited the Baton Rouge Refinery for one week to make a thorough study and report on the situation. River Pollution Control Problem at US-BR006092. Both were Standard employees. W. L. Drager, Chief Engineer, Memorandum to the Directors (May 1, 1943), BRHIS-00002109-10.

250. Messrs. Bunn and Schrader made several conclusions and recommendations: (1) construction of a skimming barge to be operated on the surface of the river adjacent to the docks; (2) furnish a supply of silt-free water for Refinery use; (3) replace South Field impounding basin with a separator of modern design; (4) provide adequate separator facilities in the Chemical Products area; and (5) create a Waste Disposal Department in the Refinery. River Pollution Control Problem at US-BR006092.

251. Standard also enlisted W.B. Hart to further survey the Baton Rouge Refinery's waste disposal problems. Mr. Hart was from the Atlantic Refining Company and considered an authority on oil refinery waste disposal and recovery. Id.

252. Mr. Hart made the following recommendations:

> (1)[I]mmediate establishment of definite responsibility for waste water quality and waste disposal[;]
> (2) protect its cleanliness and arrange for direct and separate discharge of condenser water to the river[;]
> (3) construction of a Master Separator to sufficiently remove oil from the effluent of existing separators[;]
> (4) construction of a silt cleaning plant near the main separators[;]
> (5) separate Refinery effluents from those of other plants[;]
> (6) dispose of accumulation in the impounding basin and provide modern separator in place[;]
> (7) inspection of refinery area and elimination of unsightly conditions, pools of oil from leaks of long standing, indiscriminate ditches to lowlands, etc.[; and]
> (8) provide adequate separator in Chemical Products area.

River Pollution Control Problem at US-BR006092.

253. Standard's first step in fulfilling the recommendation to establish definite responsibility and control of waste disposal was taken in April 1944 by the appointment of W.C. Clark as coordinator of Standard's entire waste disposal program. Id. at US-BR006093; J.E. Miller, Operation of the Oil Conservation Department of the Baton Rouge Refinery (May 1950), BRHIS-00013937-89 at BRHIS-00013938.

254. Standard formed the Oil Conservation Department (the "Department") at the Baton Rouge Refinery in April 1944. The Department was organized to handle all activities associated with the control of stream pollution. Master Separator in Callaghan Bayou at BRHIS-00014109; G. F. Ullrich, Separate Department Handles All Activities Associated With Esso Standard's (Baton Rouge) Stream Pollution-Control Program (Apr. 21, 1949), BRC-00012064-66 ("Separate Department Handles All Activities"); B. W. Pitchford, Oil Conservation Department (Mar. 1, 1946) (BRC-00013127-29.

255. W.C. Clark, then-superintendent of Standard's Package & Shipping division, headed the Oil Conservation Department. Originally, the Department had 27 personnel; by March 1946, there were 40 personnel in the Department. Oil Conservation Department at BRC-00013127.

256. The problems of the Department were "better control and operation of all Refinery separators, reduction of the quantity of oil discharged to the separators, elimination of emulsion-forming materials from the separators, and better methods for the separation of oil and water recovered from the separators." Separate Department Handles All Activities at BRC-00012064.

257. Between 1944 and 1950, Standard expended approximately $982,000 on projects for preventing pollution at the Baton Rouge Refinery. An additional $346,390 was proposed for 1950. The Department believed this type of data was needed to show State Control agencies "that the Refinery is serious in its attitude toward pollution control." Operation of the Oil Conservation Department at BR-HIS00013947.

258. After the Corps' visit to the Baton Rouge Refinery, an August 4, 1944, internal document reported that Standard had started a "definite program" for resolving river pollution and "[d]efinite responsibility for waste disposal ha[d] been established." Letter from George H. Hudson, District Engineer to Chief of Engineers, U.S. Army (Aug. 4, 1944), US-BR006087-88.

259. Mr. Bunn's proposal to de-silt the Refinery's water supply was considered, but the "enormous outlay" of an estimated four million dollars made that recommendation prohibitive. A single silt cleaning plant was proposed instead. River Pollution Control Problem at US-BR006093.

260. On July 5, 1944, Standard submitted to the PAW a request for priority allocation of steel, copper, and labor to build a master separator at the Baton Rouge Refinery. Standard submitted a separate application for the equipment required for the silt treating unit. Letter from M. W. Boyer, Standard, to PAW (July 5, 1944), BRHIS-00014046-55 at BRHIS-00014049; see Letter from M. Boyer, Standard Oil Co. of Louisiana, to PAW (July 5, 1944) Id. at BRHIS-00014046.

261. Mr. Gravel stated that Standard was required to seek approval before constructing the master separator because of the PAW's allocation of materials. Gravel Dep. Vol. II, 500:11-18; see also Brigham Dep., 492:6-493:2.

262. In Standard's July 1944 request for the master separator, Standard "proposed to construct a new master separator to handle the effluent from the existing separators." BRHIS-00014046. Standard explained that the Corps had informed Standard that it "must take steps to eliminate the emission of oil to the river and these facilities are for that purpose." Separate Department Handles All Activities at BRC-00012024.

263. Mr. Gravel stated that the Corps identified the problem, Standard proposed a solution, and the Corps accepted that solution. Gravel Dep. Vol. II, 417:13-418:6.

264. Standard's proposal for a master separator required United States' approval due to the materials and labor required. Letter from George H. Hudson, District Engineer to Chief of Engineers, U.S. Army, US-BR006087-88; Gravel Dep. Vol. II, 500:11-18. Mr. Gravel was unaware of any statute or other legal authority requiring government approval of a waste disposal project where that project did not involve use of allocated materials. Gravel Dep. Vol. II, 439:1-9.

265. During WWII, "it was not possible to devote much technical manpower to the problem of effluent improvement since it was obvious that saving surface waters was secondary to saving men." S. O. Brady, Effluent Improvement Program at Humble's Baytown Refinery, BAYC-00013616.

266. The Corps endorsed Standard's proposed project and believed that the PAW and WPB should approve the request for materials and labor to construct the master separator. Letter from George H. Hudson, District Engineer to Chief of Engineers, U.S. Army at US-BR006087-6088; Separate Department Handles All Activities at BRC-00012024.

267. By July 24, 1944, Standard had completed process designs for the silt cleaning plant and received bids for construction of a master separator, dredge, and attendant facilities, as recommended by Messrs. Bunn and Hart. At the time, Standard expressed "some doubt that construction of these facilities will be permitted by the WPB until the postwar period." River Pollution Control Problem at US-BR006093.

268. In July 1944, Standard had provided temporary facilities to treat the emulsion impounded in the South Field basin. These facilities included a 20,000-barrel tank, a 400-barrel drum for storing liquid soda ash, an external heat exchanger, and pumping and circulating facilities. Id.

269. In July 1944, Standard also reported that it had made certain improvements in preventing waste oil from reaching the sewers, in picking up accumulation from leaks in ditches and low areas in the fields, and in trapping the waste from the Chemical Products area. Id.

270. Even with these improvements, in July 1944 Standard stated that "there is much to be done to eliminate all sources of river pollution, provide adequate disposal of waste, and maximum recovery of petroleum and usable spent caustics and acids." Id.

271. When the Corps was informed that the steel needed for installation of the master separator would have to come from cuts in steel for high octane gas plants, it could not state that the master separator should have priority. Letter from M.C. Tyler, Division Engineer, to C. of E., SPEWR (Aug. 7, 1944), US-BR006086. Ultimately, the Corps concurred with the PAW's final recommendation to the WPB that materials for the master separator project be disapproved and materials for the silt treating unit be approved. Letter from F.R. Denton, Acting Director, Army Service Forces, Production Division, to Chief of Engineers (Aug. 23, 1944), US-BR006083.

272. In company internal correspondence dated August 12, 1944, Standard wrote to the Standard Oil Development Co., stating in part:

> We believe that you are fully aware that our two projects covering the master separator and the mud washing and emulsion treating facilities can be handled separately. Although we think the installation of both projects is very desirable, if in the interest of conservation of materials and manpower it is necessary to postpone at least part of these projects, we believe that the installation of mud washing and emulsion treating facilities should be given preference, since they could be installed more quickly and more could be accomplished in correcting pollution problems with a smaller investment.

Letter from N.J. Voorhies to E.N. Barlow (Aug. 12, 1944), BRHIS-00014044; Gravel Dep. Vol. II, 448:8-453:3.

273. On August 22, 1944, the PAW wrote to Standard concerning Standard's request for materials to build the master separator. The letter informed Standard:

> This application for the water separator has been reviewed by the Facility Security Division of the Petroleum Administration for War and it is their opinion that this project *is not of sufficient essentiality to the war program* to warrant its installation at the present time and should be considered for a post-war project. That Division has also contacted the Army Engineers as to the urgency of these facilities and it was the opinion of the Army Engineers that this was a desirable project and should be installed as soon as manpower and material conditions would permit but did not consider it so important that it could not wait until a post-war program was available. However, it is the opinion of the Army Engineers and also the Facility Security Division that the silt treating system . . . is urgently needed and should be installed as soon as possible.

Letter from B. Brown, Ass't Deputy Petroleum Admin., PAW, to M. Boyer, Vice President, Standard Oil Co. Louisiana (Aug. 22, 1944), BRHIS-00015127 -28 at BRHIS-00015128 (emphasis added).

274. The PAW recommended that Standard's project for the master separator be denied without prejudice for submission at a future date. Id.

275. Because of "material shortages," Standard did not obtain United States approval for its proposed master separator during WWII. Master Separator in Callaghan Bayou at BRHIS-00014109.

276. Standard's request for equipment to construct the silt treating unit was approved. Gravel Dep. Vol. II, 448:8-18. Standard also received approval to construct a building to house its new Oil Conservation Department. Gravel Dep. Vol. II, 447:11-18.

277. Standard had hoped that the master separator would not be necessary. With this in mind, Standard built the silt treating unit at the Baton Rouge Refinery and placed it in operation in September 1945. The silt unit removed the necessity of washing the silt from the separators into the Canal. Master Separator in Callaghan Bayou at BRHIS-00014109; Standard, Silt Treating Unit (Oct. 20, 1945), BRC-00012061.

278. On July 7, 1944, Standard wrote to the PAW, referencing a recent visit to the Baton Rouge Refinery when the PAW made an "offer of assistance on acid problems." In response, Standard stated that "it would be very helpful to us if [the PAW] could suggest an outlet for spent alkylation acid of around 88% acidity." As Standard had previously told the PAW, Standard was utilizing spent alkylation acid as much as it could in its treating operations at the Refinery. Letter from M. Boyer to R. Reuter, PAW (July 7, 1944), MAA_EM-004008.

279. On July 17, 1945, Standard had received priority assistance from the United States to construct new sulphuric acid facilities and a sewer project at the Baton Rouge Refinery. Letter form M. Boyer to G. Parkhurst (July 21, 1945), BRC-00028280.

280. On July 21, 1945, Standard notified the United States that, since applying for approval, "conditions ha[d] changed so that [Standard] did not wish to proceed with either of the projects at the present time." Specifically, Standard stated:

> We have made certain alterations and minor additions to our existing Acid Plant which have taken care of our acid recovery, and these together with the fact that there have been some changes in the capacity needed, make it unnecessary to build the new acid facilities. We hope to complete in the near future a Silt Treating Plant for deoiling the silt from our separators, and we believe that this might prevent oil spillage from getting into the river to the extent that we may not need the new facilities covered by the Separator and Sewer Project. We, therefore, do not expect to proceed with these facilities for some time, certainly not before the end of 1945. We believe that if we should at some time in the future wish to proceed with those facilities, it will be after the priority system has changed so that special approval will not be needed.

Letter from M. Boyer to George Parkhurst (July 21, 1945), BRHIS-00006518.

281. The Corps visited the Baton Rouge Refinery in March 1946 and required Standard to provide a "complete outline of what [Standard was] going to do to eliminate the pollution of the river and a date by which [Standard] would complete the work." In response, Standard wrote the Corps stating: "It is our plan to have all reasonably objectionable pollutants under control by April 1, 1947." Standard promised that "[t]he dredging of a large section of Callaghan's Bayou and the installation of a more efficient skimming facilities should begin about July 1 and be completed by November 1. This will serve as a master separator for final clean up

of all main Refinery separators." J.E. Miller, Proposed Earthen Separator for Callaghan's Bayou (Aug. 27, 1948), BRC00000461-63 at BRC-00000462.

282. Exxon has taken sole credit for waste disposal process changes after WWII. Pl.'s Resp. to Def.'s Interrog. No. 5 (Jan. 26, 2012) (Baton Rouge) (responding to request to "[d]escribe in detail any changes or improvements *you* made to the waste handling system at the Baton Rouge Complex . . . after WWII") (emphasis added).

283. In 1950, the purpose of the Oil Conservation Department at the Baton Rouge Refinery was to prevent river and air pollution, reduce product degradation to the sewers, and coordinate the Refinery's loss reduction programs. Operation of the Oil Conservation Department at BRHIS-00013938.

284. The Department "represent[ed] the most complete organization of its kind in the oil industry and ha[d] been cited as the ideal type of organization for the work it perform[ed]." Operation of the Oil Conservation Department at BRHIS-00013970.

285. As of 1950, the prevention of river pollution was the most important duty of the Department and all of its divisions helped with this work. The Department reported that "[t]he planning for the design and improvement to the facilities for this purpose has required a large amount of time and study on the part of the technical groups in the Refinery as well as the personnel of the department." Operation of the Oil Conservation Department at BRHIS-00013938.

286. In a May 1950 document, the Department identified the principal federal and state laws governing pollution and discussed how the laws directly or indirectly affected the Baton Rouge Refinery. Id. at BRHIS-00013938-13939.

287. The Department also identified possible sources of river pollution from the Baton Rouge Refinery, provided a summary of the projects that were completed between 1944 and 1950 for preventing pollution at the Refinery and projects for further reducing pollution, and identified immediate air pollution problems confronting the Refinery. Operation of the Oil Conservation Department at BRHIS-00013943-55.

288. Slop reduction was one of the major activities of the Department in 1950. Id. at BRHIS-00013955.

289. The Department was also responsible for the maintenance and operation of the Baton Rouge Refinery's sewer system. Id. at BRHIS-00013957.

290. Coordinating tank cleaning was handled by one of the Department's foremen. Id.

291. The Department handled the operation of the Baton Rouge Refinery's main separators, as well as several small separators. A Department foreman was responsible for reporting any condition that might contribute to pollution. Id. at BRHIS-00013958.

292. As of May 1950, Standard had not started building the master separator at the Baton Rouge Refinery that it had proposed in 1944 (see SOF No. 260). The Department believed that there "should be no real delay in carrying through the project unless it develops that the cost is excessive." Id. at BRHIS-00013953.

293. Standard began operating the master separator in October 1952. See Petroleum Technical Service, Background on Esso's Silt Disposal Problem (Mar. 18, 1959) at BRC-0022731-33; The Stanocolan (Vol. 29, No. 12, Oct. 31, 1952), BRC-00020966-87 at BRC-00020985 ("The new master separator went into actual service on October 24.")

294. By the early 1950s, Exxon had created a Central Refinery Loss Committee ("Committee") comprised of company employees and personnel from several of its refineries. Standard, Twenty Third General Meeting of the Central Refinery Loss Committee (Apr. 8-10, 1953), MIS-00028127-46.

295. A Committee meeting was held between March and April 1952 in Houston, and meeting minutes show that Humble reported on the status of its effluent improvement program. Id. at MIS-00031628. The meeting minutes also discuss Humble's implementation of a cathodic protection program at the Baytown Refinery. Aimed at reducing corrosion leaks in, and replacement of, underground lines at the Refinery, this program had been created by Humble in 1948 and was expected to be completed in June 1952. Standard, Twenty-Second General Meeting Minutes (Mar. 31-Apr. 4, 1952) at MIS-00031646.

296. By April 1953, Standard's Manufacturing Department had approved the Committee's action in appointing four sub-committees to study four fields and prepare recommendations by which the Committee can "further advance the conservation and pollution abatement programs." One of the four fields was "[d]evelopment of a program for fundamental research in air and water pollution abatement." Id. at MIS-00028128-29.

297. At the Committee's April 1953 meeting in New York, W. F. Thiede stated that "Management is looking to the Refinery Loss Committee for guidance on the best possible design and utilization of tankage from the conservation standpoint, the best way to operate gas handling facilities to minimize leakage and flaring, and improved methods for removing oil from waste water to avoid evaporation loss and harbor pollution." Id. at MIS-00028131. Mr. Thiede was a then-member of Standard's New York Manufacturing Department. Id. at MIS-00028136.

298. Attendance at the Committee's April 1953 meeting included personnel from the Baytown and Baton Rouge Refineries. No United States representatives were identified as attendees at the meeting. Id.

299. At the Committee's meeting, J. E. Miller from the Baton Rouge Refinery was appointed to serve on a "committee whose purpose was stated to be 'to formulate a program for fundamental research on air and water pollution.'" Committee on Fundamental Research for the Central Refinery Loss Committee (Apr. 22, 1953), MIS-00028137-42 at MIS-00028137.

Following the Committee's April 1953 meeting, the Oil Conservation Department at the Baton Rouge Refinery prepared a 3-page document titled, "List of Projects for Consideration for Fundamental Research on Air and Water Pollution." Id. at MIS-00028139-28142.

300. The first meeting of the Central Refinery Loss Committee Subcommittee on Air and Water Pollution Research was held on July 28, 1953. J. E. Miller was chairman of the subcommittee. Minutes from the July meeting state that the subcommittee identified four items for fundamental research by the company: desulfurization of crude oil, removal of suspended solids from chemical wastes, fluidized bed filtration of liquid effluents, and recovery of $SO_2$. The subcommittee also identified six additional areas as worthy of further study: elimination of blue haze, sale of waste chemicals, disposal of spent caustic, flocculation at salt water refineries, improvement of smokeless flares, and filtration of wastes. Moreover, the subcommittee made two recommendations: first, that the responsibility for checking designs for waste disposal problems and getting solutions developed and included in the designs be placed on one man in each of the major process development and design organizations; and second, that a careful study be made to see how the mass of material that is published on pollution and waste disposal be made available to those in the company that needed it. Minutes of the First Meeting of The Subcommittee on Air and Water Pollution Research of the Central Refinery Loss Committee (Oct. 7, 1953), MIS-00028143-28146.

301. In a document dated April 4, 1951, Standard wrote to the RRC requesting prior approval for improved separator skimming facilities at Plancor 572 at Baton Rouge. Accompanying the request was an attachment that included sections on, among other things, a "Brief Description of Present Facilities and to What Extent Inadequate." The attachment provided that the work on the project would be prepared by "Esso mechanical forces." The attachment had been previously prepared by Esso's Chemical Technical Service in Baton Rouge. Memorandum from Cecil Duncan to W.N. Munster (Apr. 4, 1951), BRC-00004298-307.

**VIII. Facts Related to Future Costs.**

302. Exxon's Complaints seek "cost recovery and/or contribution under Sections 107 and 113(f)(3)(B) of [CERCLA] . . . and . . . declaratory relief under Section 113(g)(2) of CERCLA . . . and the federal Declaratory Judgment Act, 28 U.S.C. §§ 2201, 2202" for past and future costs that Exxon has incurred or will incur to address hazardous substances at the Baytown and Baton Rouge Refineries and chemical plants ("Complexes"), as well as any costs to be incurred at "other nearby areas or surface waters" (collectively, "Sites"). See Baton Rouge Compl. ¶¶ 1-2; Baytown Compl. ¶¶ 1-2.

303. Exxon also seeks a judgment pursuant to Section 107(a) of CERCLA holding the United States "strictly, jointly and severally liable for the response costs incurred or to be incurred" by Exxon at the Baytown and Baton Rouge Sites. See Baton Rouge Compl. pp. 11-12; Baytown Compl. pp. 14-15.

304. Exxon claims that the total amount of past costs including accrued interest for specific cost components at the Baytown Site is $63,942,278.00, which includes $15 million in short-term known future costs to be spent by 2016. Gravel Rpt. at 136, n.593.

305. Exxon claims the total amount of past costs including accrued interest at specific cost components at the Baton Rouge Site is $33,275,125.00, which includes $1.875 million in short-term known future costs to be spent by 2016. Gravel Rpt. at 225, n.967.

306. Exxon does not know the extent of contamination of the Houston Ship Channel, Black Duck Bay, Scott's Bay, Mitchell Bay, and the Monte Sano Bayou and underlying sediments. Expert Report of Richard Lane White, June 18, 2012 at 24, 71-72, 105.

307. Exxon has not conducted any generalized sampling of the Houston Ship Channel, Black Duck Bay, Scott's Bay, Mitchell Bay, or the Monte Sano Bayou to determine the existence, source, magnitude, geographic extent or other parameters of any contamination. Gagnon Dep. Tr., 22-24, 196:3-10, 199:14 -209:2 (Vol. I, April 11, 2013). Exxon's sampling of the water bodies has been limited to sampling of the water in Mitchell Bay, the Houston Ship Chanel and Black Duck Bay, and sediment along the shoreline of Mitchell Bay in order to determine whether contaminated groundwater at the Baytown Complex has migrated to the water bodies. Id.; see also ExxonMobil, Offshore Report ExxonMobil Baytown Refinery Mitchell Bay Docks 2 to 7 Baytown, Texas (Oct. 17, 2011), BAYTECH-00122665-706.

308. There is no evidence that contaminants related to the production of war products during the 1940s and 1950s are present in the underlying sediments of the Houston Ship Channel, Black Duck Bay, Scott's Bay, or the Monte Sano Bayou or that any contaminants present along the shoreline of Mitchell Bay extend into the Bay, were caused by the production of war products, or will drive any future required response action.

309. Exxon has not incurred any costs to remediate the Houston Ship Channel, Black Duck Bay, Scott's Bay, or Mitchell Bay. Gravel Rpt. at 42-43 (listing cost component areas and depicting locations).

310. Although Exxon lists the Monte Sano Bayou as a cost component area, Exxon's past costs have been for soil and groundwater remediation near chemical plants in proximity to the Monte Sano Bayou. Gravel Rpt. at 139-140 (listing cost component areas and depicting locations).

311. There is no evidence that Exxon has incurred past costs to address contamination of the Monte Sano Bayou itself, or underlying sediments.

312. Exxon currently has a permit to discharge stormwater from the Baytown Complex into Scott's Bay. TPDES Permit No. WQ0001215000, Texas Commission on Environmental Quality Permit to Discharge Wastes issued June 22, 2009, US-BT015510.

313. Exxon currently has a permit to discharge 5,000 pounds of oil and grease per day from the Baytown Complex into Black Duck Bay. TPDES Permit No. WQ0000592000, Texas Commission on Environmental Quality Permit to Discharge Wastes issued January 26, 2011, US-BT-15468.

314. There is no evidence that it has been required to investigate the extent of contamination of the Houston Ship Channel, Black Duck Bay, Scott's Bay, Mitchell Bay, and the Monte Sano Bayou and underlying sediments by EPA or a State agency, or that any such investigation is contemplated.

Dated: September 30, 2013

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that, on September 30, 2013, I electronically filed a true and correct copy of the foregoing with the Clerk of the Court using the Electronic Case Filing System of this Court, which will send notification of such filing to the attorneys of record who have registered ECF email addresses with this Court.

/s/ Brian H. Lynk